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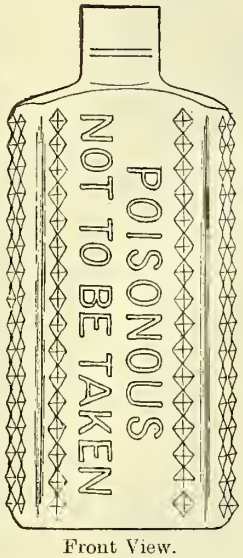
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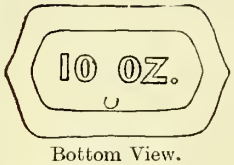
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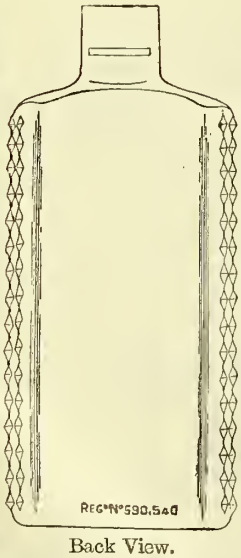
"POISONOUS" POISON BOTTLE



Front View.



Bottom View.
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Back View.

The Cheapest Poison Bottle in the Market.

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CUT THIS OUT AND KEEP FOR REFERENCE.

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COLLAPSIBLE TUBES
Betts & Co.
Brooks, Peel & Co.

COLOURS, BEVERAGE, &c.
Barnett & Foster
Boake Roberts & Co.
Stevenson & Howell, Ltd.

COLOURS, CHEMICAL
Williams Bros. & Co.

COMBS
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, Francis & Sons, Ltd.

CONDENSERS
Bennett, Sons & Shears, Ltd.

CONFECTIONERY COLOURS
Williams Bros. & Co.

CONTINENTAL PROPS.
Wilcox, Jozeau & Co.

COPPERSMITHS
Braithwaite, H., & Co., Ltd.
Bennett, Sons & Shears, Ltd.

CORKS
Ayrton, Saunders & Co., Ltd.
Mitchell, N. W., & Sons, Ltd.
Swales, Thomas
Viscose Development Co., Ltd.

CORN EXTERMINATOR
Gardner

CORN PLASTERS
Solport Bros.

COUNTER ADJUNCTS
Evans Sons Lescher & Webb Ltd

COUNTER BILLS
Ford, Shapland & Co.

COUNTER DISPLAY STANDS
London & Colonial Mfg. Co.

COUNTER SPECIALITIES
Allen & Hanburys, Ltd.
British Drug Houses, Ltd., The
Hewlett, C. J., & Sons
Lloyd, T. H., & Co., Ltd.
Lorimer Marshall
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Southall Bros. & Barclay, Ltd.

COURT PLASTER
Pharm. Indust. Ges. (Offenbach)
Solport Bros.

CREAM OF TARTAR
British Drug Houses, Ltd., The

CREOSOTE
Baiss Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood, Ltd.
Morson, T., & Son

CREPE BANDAGES
Burge, Warren & Ridgley, Ltd.
Gimber, W., & Son
Leslies, Ltd.
Norwich Crêpe Co. (1856), Ltd.
Wood, Vincent

CRUTCHES
Bush, H. W., & Co., Ltd.
Maw, S., Son and Sons

CYANIDES
May & Baker, Ltd.

DAIRY SPECIALITIES
Fullwood, R. J., & Bland
Oldfield, Pattinson & Co.

DENTAL INSTRUMENTS
Hatrick, Jas. L., & Co., Ltd.

DENTAL MECHANICS
Browning, A. J.
Cullwick H. E.
Fentiman, A. G.
Fentiman, A. J., & Co.
Garthwaite, H.
Halder, E. C.
Wardale & Co.

DEVELOPERS
Express Developing Co.

DEXTRINE
Fink, F., & Co.

DIABETIC FOODS
Ayrton, Saunders & Co., Ltd.
Brusson Jeune
Van Abbot, G., & Sons

DIGESTIVE PRODUCTS
Armour & Co., Ltd.
Benger's Food, Ltd.
Fairchild Bros. & Foster
Parke, Davis & Co.
Squire & Sons
Widenmann, Broicher & Co.
Zimmermann, O., & Co.

DENTIFRICES
Bash & Co.
Beecham, T.
Bell (John), Hills & Lucas, Ltd.
Blackie, Robert
Calvert, F. C., & Co.
Christy, T., & Co.
Cook, E., & Co., Ltd.
Eneryl, Ltd.
Jewshury & Brown
John Strange Winter
Knox, Walker, J., & Co.
Lambert Pharmacal Co.
McKesson & Robbins (*Insert*)
Mason Bros. & Chapman
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Riedel, J. D., & Co.
Sangers'
Standard Tablet & Pill Co., Ltd.
Woolley, J., Sons & Co., Ltd.

DEVELOPERS (PHOTO)
Griffin, John J., & Sons, Ltd.
Johnson & Sons (Mfg. Ch.), Ltd.

DISINFECTANTS
Baiss Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood, Ltd.
Calvert, F. C., & Co.
Condy & Mitchell, Ltd.
Cook, E., & Co., Ltd.
Joyes' Sanitary Compds., Ltd.
Sanitas Co., Ltd.
Tomlinson & Hayward, Ltd.
Willows, Francis B. & T.
Wright, Layman & Umney, Ltd.

DOUCHES
Eschbaum, F. A., Ltd.
Maw, S., Son and Sons
Reuter, R. J.

DRUGGISTS' SUNDRIES
Ayrton, Saunders & Co., Ltd.
Barclay & Sons, Ltd.
Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Bush, H. W., & Co., Ltd.
Christy, T., & Co.
Edwards, W., & Son
Evans Sons Lescher & Webb Ltd.
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Poths, H., & Co.
Quelch, H. C., & Co.
Reuter, R. J.
Sangers'
Schutze, F., & Co., Ltd.
Shirley Bros., Ltd.
Solport Bros.
Southall Bros. & Barclay, Ltd.
Swales, Thomas
Toogood, W., Ltd.
Wattenbach, O.
Woolley, J., Sons & Co., Ltd.

DRUGS, CRUDE
Baiss Bros. & Stevenson, Ltd.
Brook, Parker & Co., Ltd.
Gathergood's Exor.
Goodall, Backhouse & Co.
Horner & Sons
Potter & Clarke, Ltd.
Ransom, W., & Son
Schmitt & Wildenhayn
Sparks, White & Co., Ltd.

DYES
Crawshaw, E., & Co.
Judson, Daniel & Son
Whitaker & Co. (Hat)

DYEWARES
Clemons, Marshall & Carbert

EAU DE COLOGNE
Farina, J. M.
Farina, J. M. (No. 4)
Farina, Johann Maria
Fiokus, Courtenay & Co.
McCracken, J. & R.
Schutze F. & Co. Ltd.
Van Oppen Ross & Co.

EAU DE COLOGNE SOAP
Van Oppen Ross & Co.

EFFERVESCENT PREPS.
Bishop, Alfred, Ltd.
Bristol-Myers Co.
Guest, Thos. & Co.
Lloyd, T. Howard & Co.
Wright, Layman & Umney, Ltd.

ELASTIC HOSIERY
Ayrton, Saunders & Co., Ltd.
Burge, Warren & Ridgley, Ltd.
Haywood, J. H., Ltd.
Maw, S., Son & Sons
Surgical Hosiery Co. Ltd.
Wood, Vincent

EDUCATIONAL INSTITS
Bath & West of England College
Birmingham & Midland Collge
Borough Polytechnic
College of Preceptors
Glasgow School of Pharmacy
Liverpool School of Pharmacy
London College of Pharmacy
North of England School
Northern College of Pharmacy
South of England College
Westminster College

ELASTIC GUM INSTS.
Mason Bros. & Chapman

ELECTRICAL NOVELTIES
Evans Sons Lescher & Webb, Ltd.
Millard Brothers, Ltd.
Ward & Goldstone

EMERY AND CLOTH
Oakey, J., & Son, Ltd.

EMULSIFIERS
Bennett, Sons & Shears, Ltd.

EMULSIONS, C. L. O. &c.
Ayrton, Saunders & Co., Ltd.
Bass Bros. & Stevenson, Ltd.

ENEMAS
Bailey, W. H., & Son
Barge, Warren & Ridgley, Ltd.
Davol Rubber Co.
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Warne, W., & Co., Ltd.

EPSOM SALTS
Corbyn, Stacey & Co., Ltd.
Howards & Sons, Ltd.

ESSENCES, CONCRETE
Lautier Fils
Tombarel Frères

ESSENCES, SOL. AND FRUIT
Alliance Drug & Chem. Co.
Barnett & Foster
Boake Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
May, Wm., Ltd.
Lautier Fils
London Essence Co.
Newball & Mason
Stevenson & Howell, Ltd.

ETHERS
Bass Bros. & Stevenson, Ltd.
Duncan, Flockhart & Co.
Howards & Sons, Ltd.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.
White, A., & Sons

EUCALYPTUS OIL
British Drug Houses, Ltd., The

EXTRACT OF HERBS
Newball & Mason
Potter & Clarke, Ltd.

EXTRACTS MEDICINAL)
Allen, Stafford, & Sons, Ltd.
Evans Sons Lescher & Webb Ltd.
Gathergood's Exor.
Hewlett, C. J., & Son, Ltd.
Parke, Davis & Co.
Ransom, W., & Son

FACTORY SITES
North-Eastern Railway
Great Western Railway

FEEDING BOTTLES
Bush, Henry, W., & Co., Ltd.
Evans Sons Lescher & Webb Ltd.
Horlick's Malted Milk Co.
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
Reutsr, R. J.
Sangers'
Shirley Bros., Ltd.

FILTERS
Berkefeld Filter Co., Ltd.

FOODS, INVALID,
Allen & Hanburys, Ltd.
Bell (John), Hills & Lucas, Ltd.
Benger's Food, Ltd.
Bovril, Ltd.
Brand & Co., Ltd.
Cox, Arthur H., & Co., Ltd.
Fairchild Bros. & Foster
Horlick's Malted Milk Co.
"John Bull" Foods, Ltd.
Lecithin, Ltd.
"Lemco and Oxo"
Lofthouse & Saltmer
Menley & James, Ltd.
Natural Food Co., Ltd.
Neave, Josiah R., & Co.
Theinhardt's Food Co.
Turtle Cup (1911), Ltd.
Wander, A., Ltd.
Willows, Francis, B. & T.

FULLER'S EARTH
Mumford, G. S., & Sons

FLESH GLOVES, STRAPS, &c.
Reuter, R. J.
Sangers'
Solport Bros.

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Alabastine Co. (British), Ltd.
Brook, Parker & Co., Ltd.
Deansmere Manfg. Co.
Ford, Shapland & Co.
Kay Bros., Ltd.
Smith, J. H., & Co.
Tunbridge & Wright

FUMIGATORS
Sanitas Co., Ltd.

FURNITURE POLISH
Elivee Company

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Bramwell, E., & Son
Howards & Sons, Ltd.

GLYCERINE
Meffert, Hermann & Co.
Price's Patent Candle Co., Ltd.

GLYCERINE PLANT
Forshaw, E., & Sons, Ltd.

GLYCEROPHOSPHATES
Merck, E.
Pointet & Girard
Reitmeyer & Co.

GOLD PAINT
Judson, D., & Son

GRAPHITE
Kahn & Co.

GRINDERS, DRUG, &c.
Allen, Stafford, & Sons, Ltd.
Goodall, Backhouse & Co.
Willows, Francis, B. & T.

GRIPE WATER
Woodward, W., Ltd.

GUMS
Fink, F., & Co.
Kidston, W. M., & Co.

HAIR DYES
Blackie, Robert
Harker, Stagg & Morgan, Ltd.
Osborne, Garret & Co.

HAIR PREPARATIONS
Anglo-Continental Trading Co.
Blackie, Robert
Chesebrough Manfg. Co.
Edwards' "Harlene" Co.
Egglossa Manfg. Co.
Harker, Stagg & Morgan, Ltd.
Harrison, G. W.
Herpicide Co.
John Strange Winter
Odol Chemical Works
Osborne, Garrett & Co.
Robare's Aureoline
Vibert, F.
Warner Oliver, Ltd.

HAT CLEANERS
Christy, Thos. & Co.
Senier, Alf., & Co.

HAT DYES
Whitaker & Co.

HAY FEVER REMEDY
Lu-Ku Co.

HEATING APPARATUS
Clark's Syphon Stove Co., Ltd.
Richmond Gas Stove & Meter

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Brook, Parker & Co., Ltd.
Pannett & Neden
Potter & Clarke, Ltd.
Ransom, W., & Son

HOMŒOPATHIC MEDICINES
Ashton & Parsons, Ltd.
Keene & Ashwell, Ltd.

HOSPITAL FURNITURE
Hatrick, Jas. L., & Co., Ltd.

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Esmond Hotel
Kingsley Hotel
Thackeray Hotel

HOT-WATER BOTTLES, &c.
Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Galen Manfg. Co., Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Schutze, F., & Co., Ltd.
Sheath Bros.
Southall Bros. & Barolay
Tompkins, James, Ltd.
Wood, Vincent

HYPOPHOSPHITES
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

HYDROGEN PEROXIDE
May & Baker, Ltd.
Sanitas Co., Ltd.
Tyrer, T., & Co., Ltd.

CHTHYOL
Ichthyol Gesellschaft

INK POWDERS
Williams Bros & Co.

INSECT POWDER
Keating, Thomas

INHALERS
Burroughs Wellcome & Co.
Maw, S., Son & Sons
Sanitas Co., Ltd.

INSECTICIDES
Christy, Thos. & Co.
Tomlinson & Hayward, Ltd.

INSTEP SUPPORTS
Scholl, C. Manfg. Co.

IODINE RESUBLIMED
Howards & Sons, Ltd.
Huskisson, H. O., & Co.

IRISH MOSS
Cumming, J. W.
Salle, H., & Co.

ITROSYL
Fletcher, Fletcher & Co.

JARS AND POTS
Johnsen & Jorgensen, Ltd.
Pfeifer, O. A.
Reuter, R. J.
Stipendum Stopper Co.

JELLOIDS
Jelloid Co.

JUJUBES
Guest, Thos., & Co.
Potter & Clarke, Ltd.

JUNKET POWDER
Armour & Co., Ltd.

LAMPS
Block Light Co., Ltd.

LANOLINE
Burroughs Wellcome & Co.

LARD
Ewen, J., & Sons

LAVENDER OIL
Jakson, John, & Co.
Zimmermann, C., & Co.

LAVENDER WATER.
Maddocks & Co.

LEATHER DYES
Williams, Bros. & Co.

LECITHIN
Chemical Works "Victoria"
Salle, H., & Co.

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Evans Sons Lescher & Webb Ltd.
Goodall, Backhouse & Co.
Idris & Co., Ltd.

LINSEED, CRUSHED, &c.
Mumford, G. S., & Sons
Taylor, J., & Sons, Ltd.

LINTS
Liverpool Lint Co.
Maw, S., Son & Sons
Robinson & Sons, Ltd.
Taylor, W. G.

LIQUORICE JUICE
Apollo
British Drug Houses, Ltd., The
Evans Sons Lescher & Webb Ltd.
Horner & Sons
Jackson, E. E.
Mumford, G. S., & Sons
Solazzi
Whittaker, Arthur

LIQUORS, CONC, &c.
Fletcher, Fletcher, & Co.
Hewlett, C. J., & Son
Robinson, B., & Co.
Wyleys, Ltd.

LITHIA SALTS
British Drug Houses, Ltd., The
May & Baker, Ltd.

LOOFAHS
Internl. Sponge Importers, Ltd.
Solport Bros.

LOZENGES
Ayrton, Saunders & Co., Ltd.
Cox, A. H., & Co., Ltd.
Denoual, J., & Co.
Guest, Thos. & Co.
Jackson, E. E.
Potter & Clarke, Ltd.
Raimes & Co.
Standard Tablet & Pill Co., Ltd.
Warrick Bros.

MAGNESIA AND ITS PREPS.
Henry, T. & W.
Howards & Sons, Ltd.
May & Baker, Ltd.
Phillips, Chas. H., Chem. Co.
Washington Chemical Co., Ltd.

MALT EXTRACT & PREPS.
Boulton, J., & Co.
British Diamalt Co., Ltd.
Davies, Sons & Co.
Evans Sons Lescher & Webb.

MANICURE PREPARATIONS
Saunders, J. Touzeau, Ltd.

MARKING INK
Hickisson, A. (Bond's)
Williams Bros. & Co

MEDICINE TUMBLERS
Bush, Henry W., & Co., Ltd.

METAL GOODS
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MICROSCOPES
Raphael's, Ltd.

MACHINERY, PHARMACAL
Allen & Hanburys, Ltd.
Bennett, E., & Son, Ltd.
Bennett, Sons & Shears, Ltd.
Bootyroyd, H. T., Ltd.
Braithwaite, H., & Co., Ltd.
Comet Chemical Co., Ltd.
Forshaw, E., & Son, Ltd.
Gardner, Wm., & Sons, Ltd.
Griffin, J. J., & Sons, Ltd.
Lister, R. A., & Co., Ltd.
Pindar, J. W., & Co.
Stokes, F. J., Machine Co.
Wilkinson, S. W., & Co.

MEAT EXTRACTS
Armour & Co., Ltd.
Bovril, Ltd.
Brand & Co., Ltd.
"Lemco and Oxo."
Tooth's Extract of Meat Co.
Turtle Cup (1911), Ltd.

MECHANICAL SHOW FIGURES
Bush, Henry W., & Co., Ltd.

MERCURIALS
Alliance Drug & Chem. Co.
Howards & Sons, Ltd.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

METHYLATED SPIRIT
Burrough, J., Ltd.
Preston's Liverpool Distillery.
Randall & Son, Ltd.

MINERAL WATERS, SALTS
Apollinaris Co., Ltd.
British Drug Houses, Ltd., The.
Hughes, E. Griffiths.
Ingram & Royle, Ltd.
Vichy (State Springs)
Vittel

MIXERS AND SIFTERS
Comet Chemical Co., Ltd.
Gardner, Wm. & Sons (Gloucester), Ltd.

MUSTARD PLASTERS
Rueff, Julius

NURSES REQUISITES
Hatrick, Jas. L., & Co., Ltd.

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Allen, Stafford, & Sons, Ltd.
Price's Patent Candle Co.
Schliemann's Oil & Ceresine Co.
Stern Sonneborn Oil Co., Ltd.

OILS, ESSENTIAL
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Alliance Drug & Chemical Co.
Boake, A., Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Delvendahl & Küntzel
Dodge & Olcott Co.
Evans Sons Lescher & Webb, Ltd.
Jakson, John, & Co.
Lautier Fils
London Essence Co.
Poppelreuter, W.
Ransom, W., & Son.
Schimmel & Co.
Stevenson & Howell, Ltd.
Tombarel Frères
Varaldi, F.
Wright, Layman & Umney, Ltd.
Zimmermann, C., & Co.

OINTMENTS
Blackie, Robert
Burgess, E.
Calvert, F. C., & Co.
Cox, Arthur H., & Co.
Oldfield, Pattinson & Co.
Peat Products (Sphagnol), Ltd.
Smith, Maurice
Zimmermann, Chas. & Co.

OLIVE OIL
Goodall, Backhouse & Co.
Sparks, White & Co. Ltd.
Varaldi, F.

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Baird, John
Botwright & Grey
Darton, F., & Co.
Maw, S., Son & Sons
Nitsche & Gunther Opt. Co., Ltd.
Raphael's, Ltd.

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Anglo American Optical Co.
British Optical Institute, Ltd.
Spectacle Makers' Company

ORANGE WINE
Hobson, Joseph & Son
Melrose-Drover Co., Ltd.
Millar, A., & Co., Ltd

OTTO OF ROSE (SYNTH.)
Crown Chem. Wks.
Wright, Layman & Umney, Ltd

PALATINOIDS
Oppenheimer, Son & Co., Ltd

PATENT AGENT
Barker, R. W

PHOTO. POSTCARDS
Bajar Ltd.

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Allen & Hanburys, Ltd.
Ayrton, Saunders & Co., Ltd.
Baiss Bros. & Stevenson, Ltd.
Blackie, Robert
Boulton, James & Co. (1909)
Brook, Parker & Co., Ltd.
Cox, Arthur H., & Co., Ltd.
Christy, Thos., & Co.
Davies, Sons & Co.
Goodall, Backhouse & Co.
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Knox Walker, J., & Co.
Lloyd T., Howard, & Co.
Lorimer Marshall
May, Roberts & Co., Ltd.
Newball & Mason
Oldfield, Pattinson & Co.
Potter & Clarke, Ltd.
Sangers'
Shirley Bros., Ltd.
Standard Tablet & Pill Co., Ltd.

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Allen & Hanburys, Ltd.
Asche, C. F., & Co.
Burroughs Wellcome & Co.
Denoual, J., & Co.
Evans Sons Lescher & Webb,Ltd.
Gnest, Thos. & Co.
Warrick Bros.

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Jakson, John & Co.

PERFUME MATERIALS
Bush, W. J., & Co. Ltd.
Delvendahl & Kuntzel
Horner & Sons
Lantier Fils
Naef, M., & Co., Succrs.
Schimmel & Co.
Varaldi, F.
Wright, Layman & Umney, Ltd.
Zimmermann, C. & Co.

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Baiss Bros. & Stevenson, Ltd.
Barclay & Sons, Ltd.
Bronnley, H., & Co., Ltd.
Bush, W. J., & Co., Ltd.
Christy, T., & Co.
Claber, S., & Co., Ltd.
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Haliflor Co.
Hewlett, C. J., & Son
Hovenden, R., & Sons, Ltd.
Jago & Jerome
John Strange Winter
Lescol Perfumery Co.
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Newbery, F., & Sons, Ltd.
Piver, L. T.
Quelch, H. C., & Co.
Rivers, Hill & Co., Ltd.
Southall Bros. & Barclay Ltd.
Van Oppen, Ross & Co.
Vinolia Co.
Warrick Bros.
West, T., & Son
Wolff, F., & Sohn

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Rendell, W. J.

PETROLEUM JELLY
Chesebrough Mfg. Co.
Schliemann's Oil & Ceresine Co.
Stern, Sonneborn Oil Co., Ltd.

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Boehringer, C. F., & Soehne
Griffin, John J., & Sons, Ltd.
Johnson & Sons (Mfg.Chts.),Ltd.
Reitmeyer & Co.

PHOTO. GOODS
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Burroughs Wellcome & Co.
Evans Sons Lescher & Webb,Ltd.
Express Developing Co.
Griffin, John J., & Sons, Ltd.
Ilford, Ltd.
Kent, G. B., & Sons Ltd.
Lennon, Ltd.
May, Roberts, & Co., Ltd.
Newbery, F., & Sons, Ltd.
Oppenheimer, Son & Co., Ltd.
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PHOTO. RUBBER GOODS, &c.
Altrincham Rubber Co.

PLASTERS
Allcock Mnfg. Co.
Berliner, Arthur
Dalmas, A. de St., & Co.
Leslies, Ltd.

PLASTIC MODELS
Knox, Walker (J.) & Co.

POISON JARS
Doulton & Co.

POSTAL BOXES
Robinson & Sons, Ltd.

PILL MAKERS
Allen & Hanburys, Ltd.
Asche, C. F., & Co.
British Drug Houses, Ltd., The
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Howards & Sons, Ltd.
Lloyd, T. Howard, & Co.
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Wand Manfg. Co.
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PRINTERS
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Burgess, E.
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Christy, T., & Co.
Corbyn, Stacey & Co., Ltd.
Crimson Cross Dispensary
Daisy, Ltd.
Damyss Virus, Ltd.
Davenport, J. T., Ltd.
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Evans Sons Lescher & Webb,Ltd.
Faulding, F. H., & Co.
Fellows' Med. Mnfg. Co.
Fennings, Alfred
Ferris & Co.
Freeman's Chlorodyne, Ltd.
Fulford, C. E., Ltd.
Goodall, Backhouse & Co.
Harrison, Geo. W.
Henry, T. & W.
Hughes, E. Griffiths
Ichthyol Gesellschaft
Kay Bros., Ltd.
Keating, Thomas
Kntnow, S., & Co., Ltd.
Lalor's Phosphodyne
Lecithin, Ltd.
"Lemco" and "Oxo"
Lincoln & Midland Counties Drug Co.
Lofthouse & Saltmer
"Ln-Ku" Co.
Mackenzie's Cure Depot
Martindale, W.
May, Roberts & Co., Ltd.
Munyon's Remedy Co.
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Oppenheimer, Son & Co., Ltd.
Owbridge, W. T., Ltd.
Phillips, Chas. H., Chem. Co.
Resinol Chemical Co.
Richter, C., & Co.
Riedel, J. D., Co.
Sangers'
Saville Bros.
Schimmel & Co.
Scott & Bowne, Ltd.
Squire & Sons
Standard Tablet & Pill Co., Ltd.
Thompson & Capper
Tunbridge & Wright
Urillac Syndicate
Wander, A., Ltd.
Warner Oliver, Ltd.
Warrick Brothers
Wilcox, Jozeau & Co.
Zimmermann, C., & Co.

PUFFS
Solport Bros.

PULVELLÆ
Warrick Bros.

PULVERETTES
Oppenheimer, Son & Co.

PUMPS
Berkefeld Filter Co., Ltd.

QUININE AND SALTS
Alliance Drug & Chem. Co.
Boehringer, C. F., & Soehne
Burroughs Wellcome & Co.
Corbyn, Stacey & Co., Ltd.
Howards & Sons, Ltd.
Pointet & Girard

RECIPES
Brooks, Tom

RESIN AND RESINOIDS
Allen, S., & Sons, Ltd.
Morson, T., & Son
Ransom, W., & Son
Smith, T. & H., Ltd.

RENNET
Fullwood, R. J., & Bland
Oldfield, Pattinson & Co.

RESPIRATORS
Zimmer & Co.

RUBBER GOODS
Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Davol Rubber Co.
Haywood, J. H., Ltd.
Maw, S., Son & Sons
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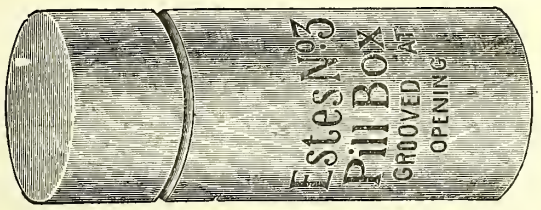
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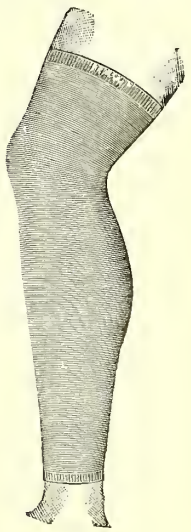
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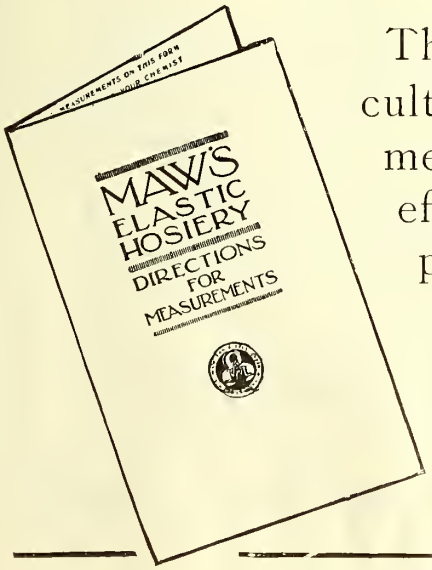
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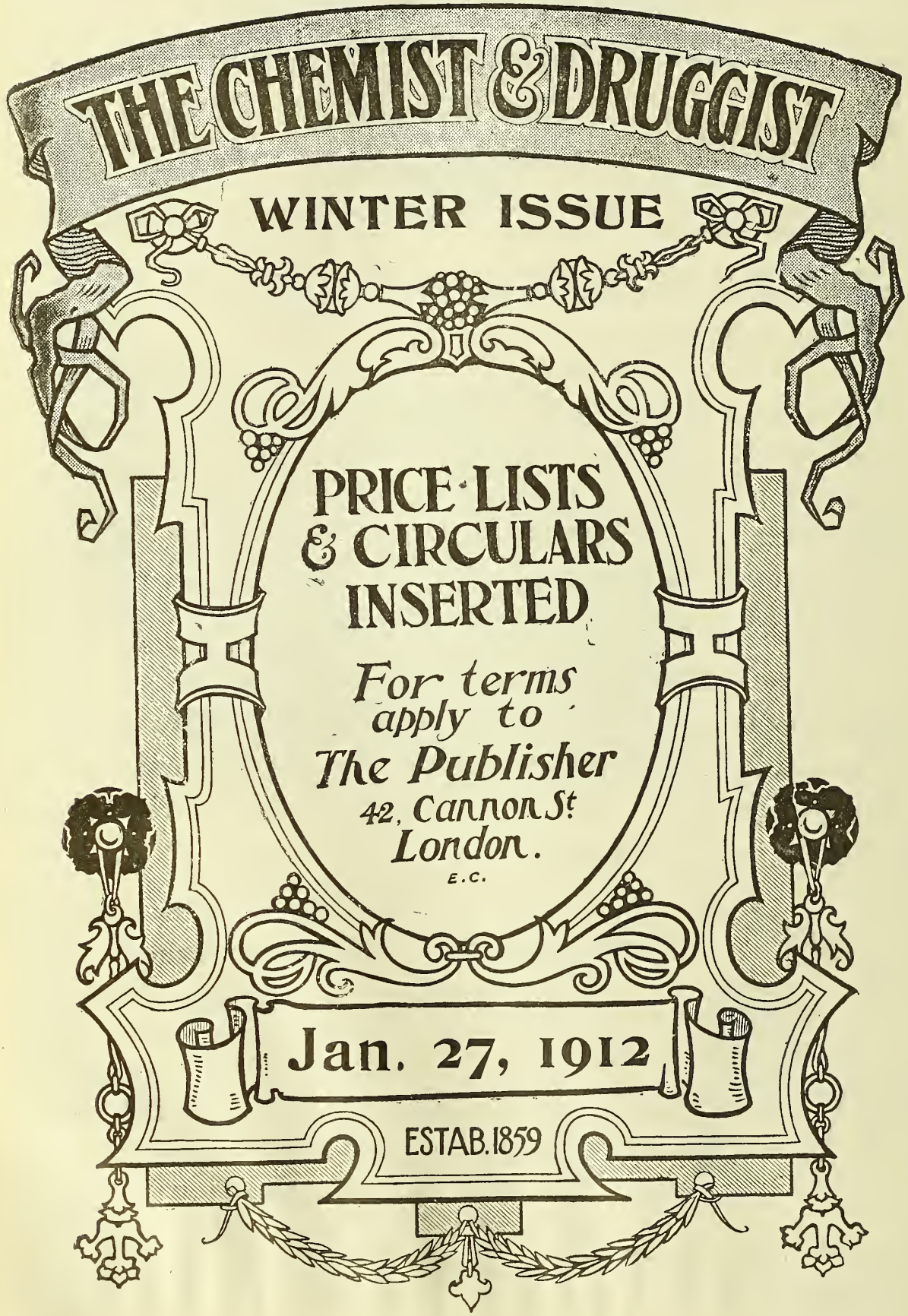


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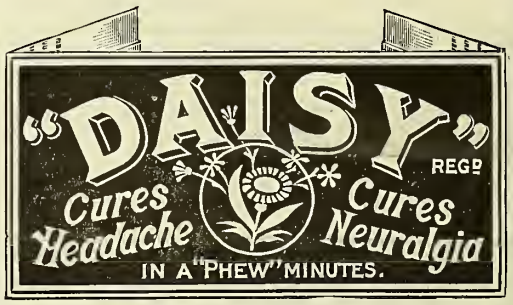
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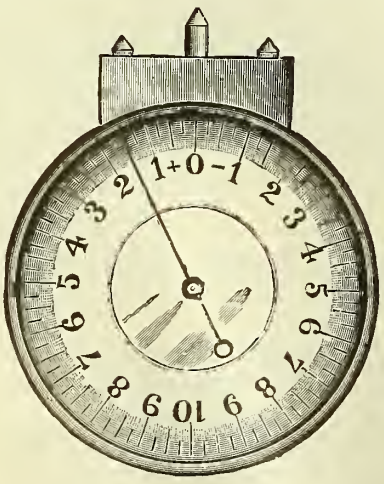


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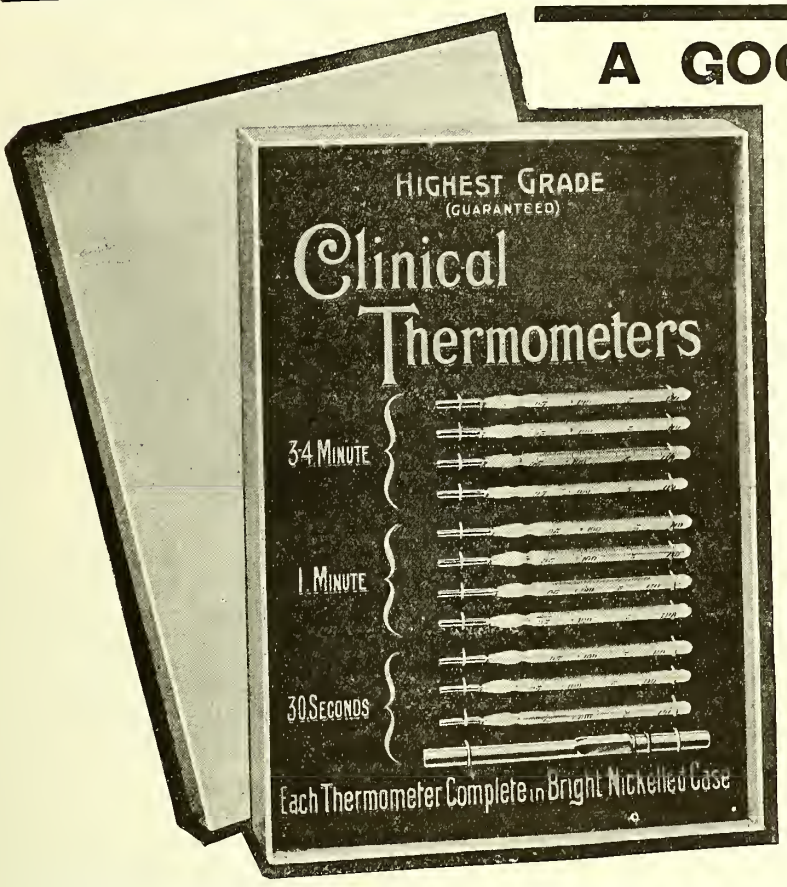
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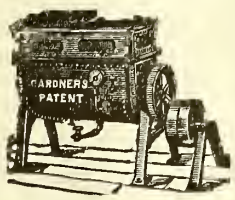
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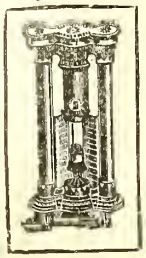
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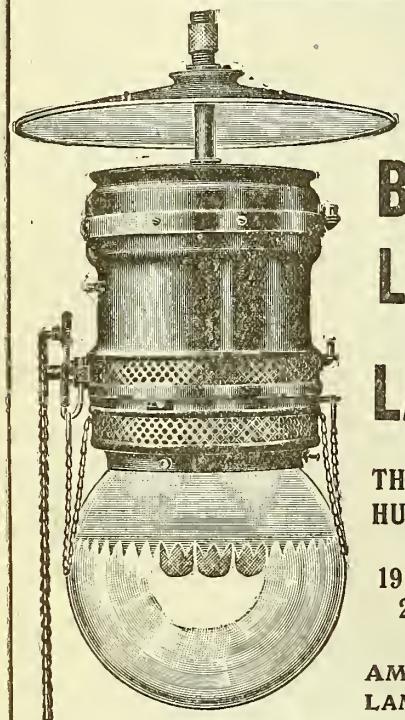
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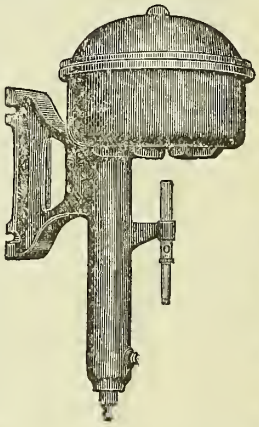
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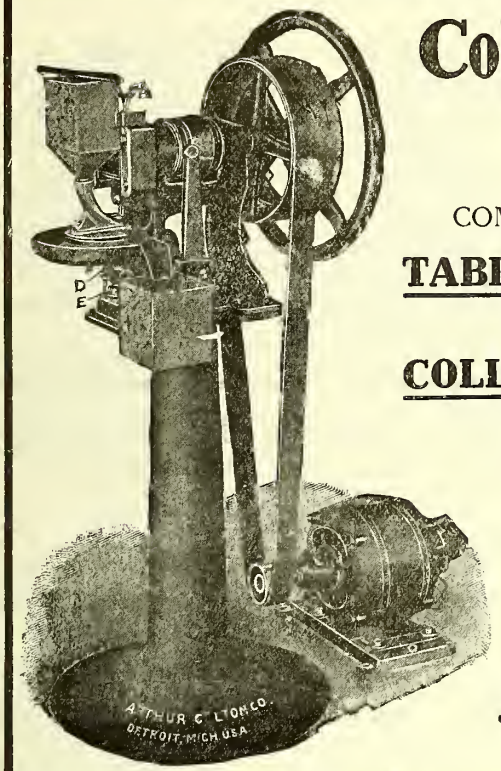
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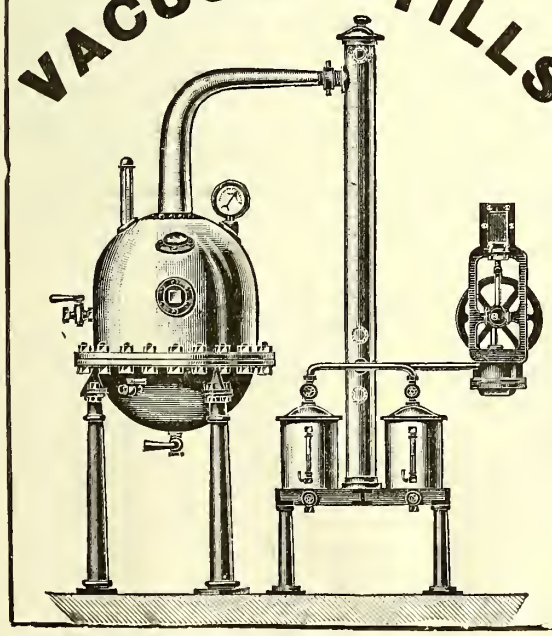
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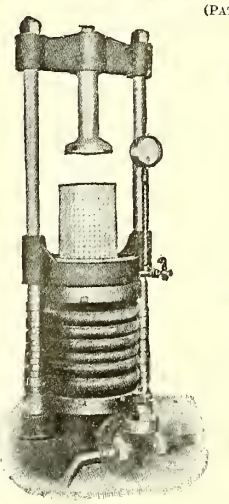
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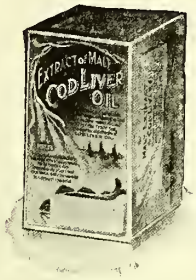
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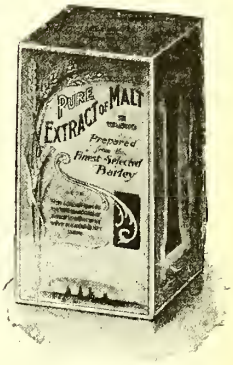
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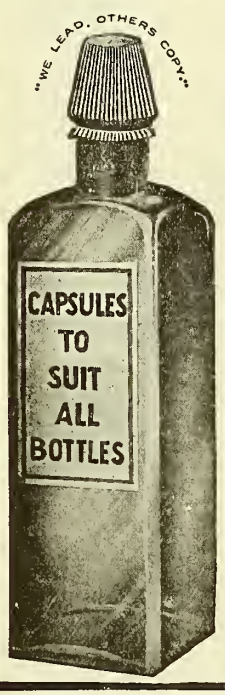




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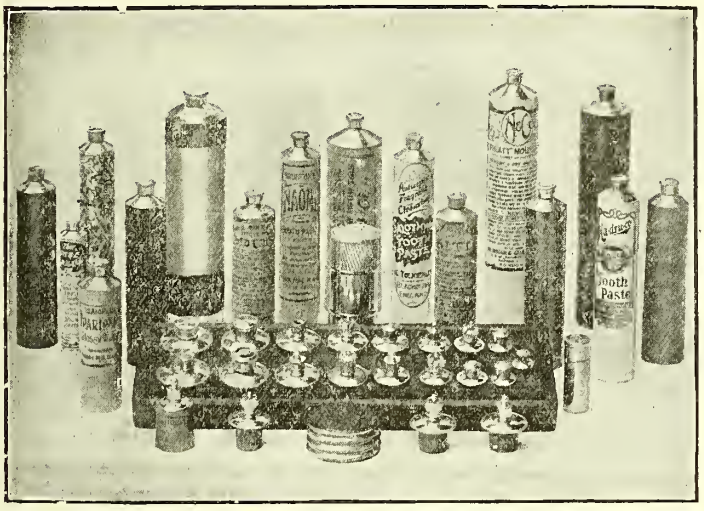
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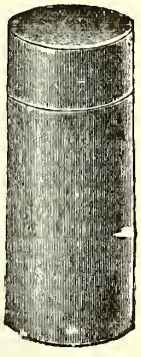
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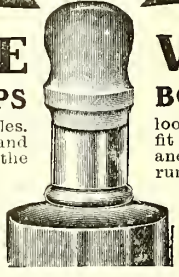
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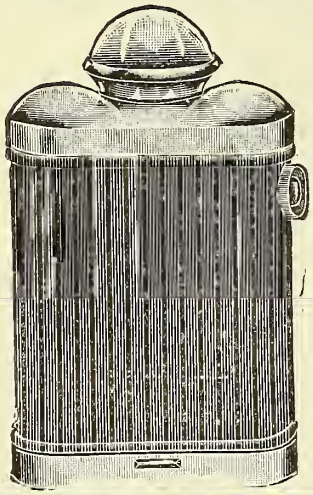
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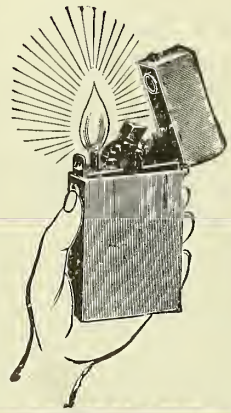
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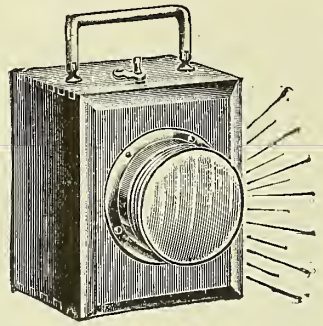
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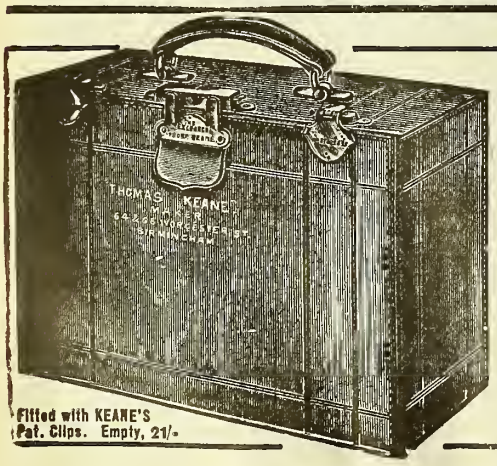
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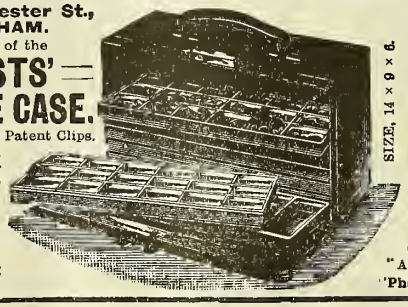
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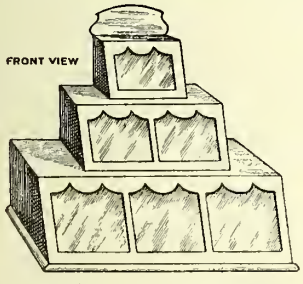
"CROSS HILLS, Oct. 6/11.
"The model I got from you for eyeglasses has proved a splendid investment, not only as a window attraction, but more especially to show my customers the various styles of frame fitting.
"Yours, etc., H. BIRDSALL."

"GLASGOW, Sept. 30/11.
"Please send 6 dozen Dyes *at once*. The window display of the Plastic Model has greatly increased the sale.
"Yours faithfully, J.P.G."

"LONDON, Oct. 14th.
"Am very pleased with Models. Sold six dozen Cough Mixture first week of showing."

Stock Models ready for despatch, own wording free. Send for Illustrated List. All Orders over 10/- carriage paid : : : in United Kingdom. : : :

The First Principle of your Business is to Attract the Public and thus Increase your Sales.



This is done by attractive Window Display.

The Public appreciate a well-displayed Counter.

The "LONCOL" PATENT ADJUSTABLE SHOW-STAND is a silent salesman and a necessity in every business house where a display is essential. Made in all sizes and any number of tiers. Regulated to any height and yet perfectly rigid. Closes up in own base for purpose of transit.

PARTICULARS ON RECEIPT OF POSTCARD TO:—

THE LONDON AND COLONIAL MANUFACTURING CO.
9 Mildmay Chambers, Union Court, E.C.

JUDSON'S
Straw Hat DYE

Has NO GLOSS!

Makes an Old Hat New at a COST OF **3d.**

All the Latest Shades
3d. and **6d.** Bottles.

DANIEL JUDSON & SON
Mack's Road, Bermondsey.

ELECTRICAL NOVELTIES

COMMAND QUICK SALES AND YIELD LARGE PROFITS. It will pay you to investigate our large illustrated novelty catalogue and our net trade price sheet post free and gratis on mentioning this paper.

W G TRADE MARK



WONDERFUL LINES!! Superior Pattern **ELECTRIC LAMP** with Bulb and Battery. Price from **6/3** dozen. Ditto with bull's-eye lense, **7/8** dozen.



'DAINTY' WAIST COAT POCKET LAMP with opal backed metal filament bulb, jewelled push, and best battery refill. Price **1/8** each.

NET TRADE PRICES OF A FEW OF OUR LEADING LINES TAKEN FROM OUR LARGE NOVELTY CATALOGUE.

	Per doz.		Each.
Superior quality **Pocket Lamps** from	6/6	**Electric Alarm Clocks** from	3/4
Electric Torchlights from	10/-	**'Imperial' Batteries** (powerful and lasting)	7d.
Electric Scarf Pins, with attachment, from	5/8	Best Quality **Refills for Pocket Lamps**, from per doz.	2/10½
Best Quality **Electric Bulbs**	2/-	**Medical Coils**	12/-

WARD & GOLDSTONE, Contractors to H.M. Government.
SALFORD, MANCHESTER.



THE 'CENTURY' PORTABLE HAND LAMP, Size 7½ × 3½ × 3½ in. Weight 2½ lb., complete with 4 volt Volex Giant Battery, **12/4½** net.

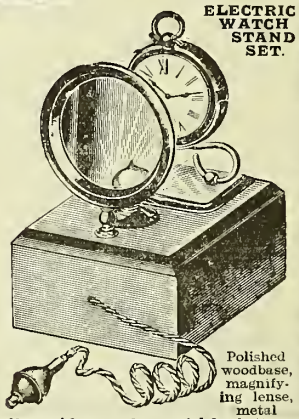


THE 'IMPERIAL' BATTERY gives best results, most powerful and lasting of all dry batteries, **7/6** dozen.



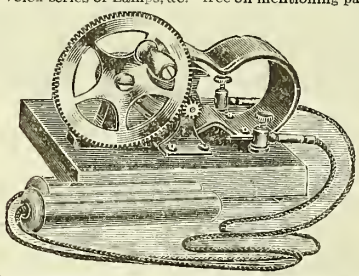
ELECTRIC TORCHES from **10/-** doz. We have just issued a Special Pamphlet on our Maltum and Volex series of Lamps, &c.—free on mentioning paper.

ELECTRIC WATCH STAND SET.



Polished woodbase, magnifying lense, metal filament lamp and powerful dry battery, without watch. Price **5/-** net.

THE 'ACME' MEDICAL COIL in beautifully polished Walnut Cabinet and Indicator. Price **8/4** each.



The 'Magnetocure.' Gives a mild or powerful shock upon turning handle. Price **26/8** per dozen net.

"IN PREPARATION."

Messrs. KAY BROTHERS, Ltd., beg to inform the Trade that they will shortly be going to press with their popular Annual, the

"FAMILY REFERENCE AND FIRST AID BOOK,"

revised and added to, containing 26 pages of interesting and useful reference matter, in stiff paper cover printed in colours; also

COUNTER BILLS

in two sizes, 11 in. × 9 in. and 6 in. × 7½ in. The larger size is specially adapted for Counter use and wrapping of 6 to 8 oz. bottles. The paper is of best quality, smooth, plainly printed *on one side only*, with large margin, and carefully cut.

Supplies of above are now being booked for winter delivery.

GRATIS, CARRIAGE PAID, PRINTED WITH NAME AND ADDRESS,

for chemists forwarding *two slip labels* and undertaking careful distribution. Population of district should be given and in the case of the Almanacks house to house distribution should be promised, as this Annual is the finest of its kind published and a credit to any Pharmacy.

NOTE.—No Advertising Matter is sent out unless asked for.

Write at once, as applications are dealt with in rotation, and the edition is limited. Address Advertisement Department.

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46 Years' Proven Efficacy For COUGHS and COLDS.

Sole Proprietors and Manufacturers—

KAY BROTHERS, LTD., Stockport.

ALMANACKS

FOR

1912.

SAMPLES FREE.

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JAMES TOWNSEND & SONS,

Chemists' Printers,

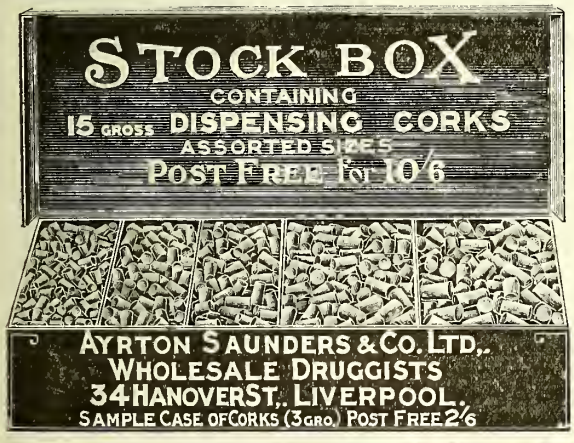
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Moulded in about 14 lb. Slabs.
" " " 1 or 2 lb. Bars.
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IMPORTERS OF
SHELLAC
Of all kinds.
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WHITE SHELLAC



Astounding Prices.

BOTTLES DISPENSING 8 oz. 8 & 4 oz. 2 oz. 7/- 6/- 5/9 per gross net.
YORKSHIRE MAKE. GREEN PANELLED 1/- gross extra
PLAIN OR GRADUATED. OTHER SIZES AT PROPORTIONATELY LOW PRICES.
Crates 1/- each, containing 6 gross.
Carriage paid within 100 miles of Leeds.

CORKS. Four sizes (1 dr. to 8 oz.) in 6 gross bags of one size 6½d. per gross.

TERMS. Net Cash 7 days. Trade references required on opening new account.

THOMAS SWALES Druggists' Sundryman 24 BUTT'S CT., LEEDS

Corks FOR 6oz & 8oz
A LEADING LINE 7d GROSS.
These corks are 1" long, all 6 and 8oz. no small ones.
20 gross bag delivered free in U.K. for 11s.6d. cash with order.
Other Qualities in Stock from 5d upwards.
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"BERKEFELD" GERMPROOF FILTERS

Awarded 3 GRAND PRIX and 1 DIPLOMA OF HONOUR at the BRUSSELS EXHIBITION, 1910.



SIMPLE IN CONSTRUCTION.

MOST EASILY CLEANED.

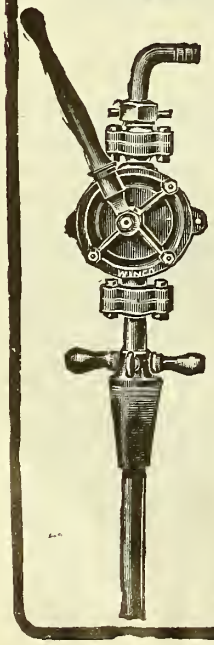
Made in a variety of patterns suitable for all purposes.

A VERY PROFITABLE LINE FOR CHEMISTS.

Write for Illustrated Catalogue.

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"WINCO" OIL & SPIRIT BARREL PUMP



IN VARIOUS SIZES.

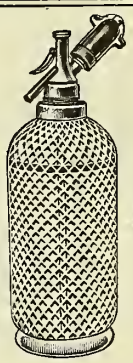
SIMPLE. RELIABLE. DURABLE. CHEAP.

Best Workmanship.

In IRON or BRASS.

Can be used for any liquid, WINE, SPIRITS, OIL, PETROLEUM, &c.

Ask for Illustrated Price List "C."



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SPARKLETS

at the Turin Exhibition was for Class 105 which included not only the Syphons and Bulbs but also the Mineral Waters made thereby. This is significant.

AERATORS, Ltd. EDMONTON, LONDON, N.

GOOD! IT'S MASON'S

The Drink for the Masses



Millions of glasses used daily by workers all over the Empire

Please allow us to Sample and Quote—

Citrate Magnesia
Health Salt
Salines
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Blood Salt
Sulph. & Sarsap. Salt
Lemonade
Crystals, &c.

NEWBALL & MASON

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IT IS IMPERATIVE THAT CHEMISTS AND OTHERS REQUIRING

ESSENTIAL OILS

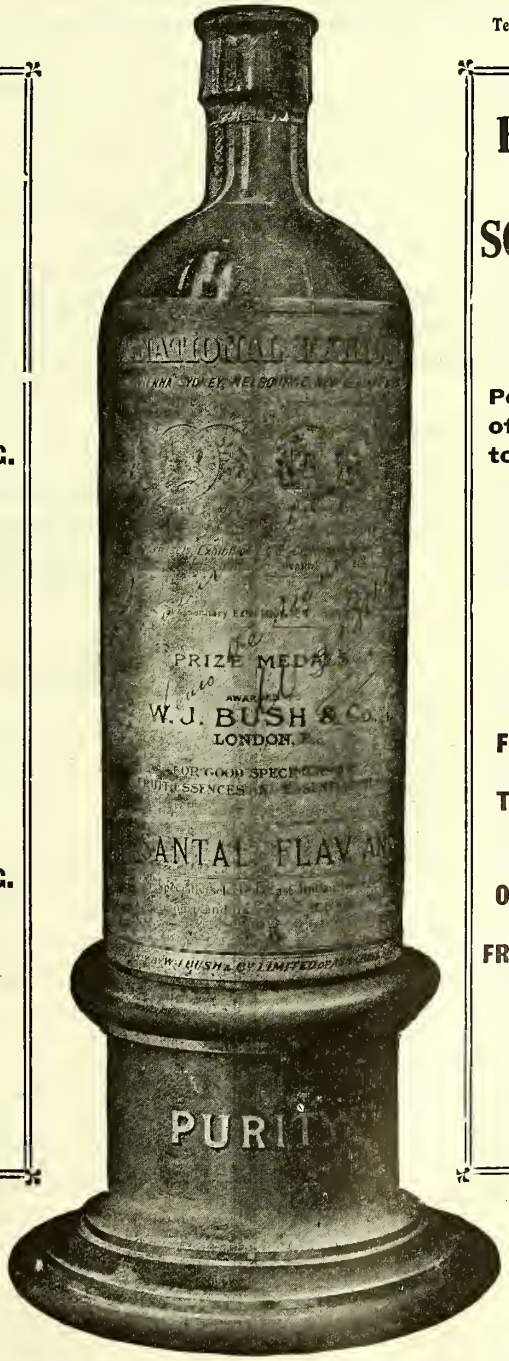
for Medicinal Purposes should employ Genuine and Finest Qualities only.

These can be obtained from W. J. BUSH & CO., LTD., who guarantee the following to be absolutely pure and to pass the tests of the British Pharmacopœia, 1898.

Telephone Nos. 461 Dalston (4 lines).

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FLORAL OTTOS
Possessing the aroma of the natural flowers to a remarkable degree.

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HARMLESS COLOURS.
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PRESERVATIVES.

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B

The Profitable Turtle



Turtle has long been popular for its nourishing and strengthening powers and its delicious flavour, with those who can afford it.

Turtle Cup puts real turtle (combined with prime beef and fresh vegetables) within the reach of everybody—a 1/- bottle will make a quart of rich soup.

Its advantages we are bringing home to the public in a powerful and sustained advertising campaign, and the demand for it is sure to be large. Are you prepared to share in the profits? We shall be glad to send you trade terms and advertising literature on application.

The margin of profit from Turtle Cup makes it well worth your while to push.

BELLIS'S Turtle Cup

Turtle Cup (1911) Ltd
15 Bury Street
St. Mary Axe, E.C.

HORLICK'S MALTED MILK

(In Powder Form).
No Cooking. Prepared instantly by stirring vigorously in water, hot or cold.

THE FOOD that BRINGS RESULTS

The first thought of experienced dietitians when selecting a palatable, nourishing, easily assimilated food.
¶ The wholesome, invigorating principles of pure milk and choice malted grain, so prepared as to be properly assimilated in the feeblest conditions.
¶ Used more extensively every year in the feeding of infants and as a supplementary nutrient for growing children. Also with increasing confidence by adults as a table beverage in the home—superior to tea or coffee at meals—and an efficient corrective of insomnia taken hot before retiring.
Endorsed by the Medical Profession.
Recommended and sold by all Chemists, in three sizes: **1/6, 2/6** and **11/-**

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SLOUGH, BUCKS.

Lofthouse & Saltmer LTD.

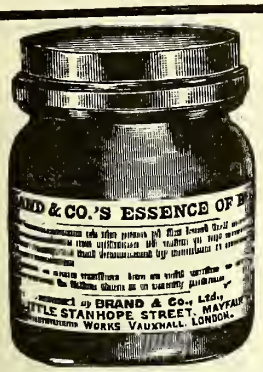
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HULL,

invite the attention of the Trade to the following well tried preparations which carry a big P.A.T.A. retail protected profit, and are well known and valued by the public in many parts of the country.

	PROTECTED RETAIL PRICE.	DOZ.
Losall's Asthma Remedy. Very effective Remedy for Asthma, Bronchitis, &c.	1/-	7/6 net.
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	1/-	7/-
	1/6	10/6
Prepared Barley ("CROWN" BRAND). Usual 1/- size, lever lid tins, for children and invalids.	bottles.	4/- net.
Malted Food. Usual 1/- size, lever lid tins. Name and address free on 3 dozen. Special design label with name and address on gross orders, if desired.		4/6

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IN GLASS

BRAND'S ESSENCE OF BEEF AND OF CHICKEN

FOR INVALIDS.

Invaluable in all Cases of Exhaustion and Weak Digestion.

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The cheapest and sweetest Proteid-Phosphate Food on the market. As now made it mixes readily with water. Ceregen comes cheaper to the public and returns you a larger profit (50% on return) than any similar article with which we are acquainted. Prices—20 ozs. 6/6; 10 ozs. 3/6; 5 ozs 2/-; 2½ ozs. 1/3 each.

CEREGEN-COCOA.

This is a highly Concentrated Food and forms a pleasant beverage. It mixes readily with water or milk, and is wonderfully nourishing and sustaining. Protected at List Prices. Prices—9d., 1/4 and 2/6 per tin.

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VITTEL

VOSGES, FRANCE.

Vittel Spa has many attractions for visitors.

Full particulars on application

GRANDE SOURCE.

The TABLE WATER for Arthritis, Gout, and Kidney Troubles. . . . .

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The TABLE WATER for Constipation, Complaints of the Liver and Stomach, Gall Stones, Glycosuria, &c. . . . .

9,000,000 BOTTLES SOLD ANNUALLY.

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SAPONINE

(SOLUBLE),

MANUFACTURED BY

C. W. FIELD,

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Special Terms to Wholesalers and large Consumers

SAL HEPATICA.

PUT UP FOR EXPORT.

Small	size,	3 oz.	bottle,	in case.
Medium	,,	7 ,,	,,	,,
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in the UNITED KINGDOM and BRITISH COLONIES, possess exclusive rights for the Sale of Saccharin in the BRITISH EMPIRE (excluding India and Canada), for all strengths of Saccharin and materials for its manufacture.

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NOVOCAIN

The non-irritant Local Anæsthetic.
For Surgical and Dental Operations.

Novocain does not contain Cocaine.

IN TABLETS AND SOLUTION.

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C. For Medullary Anæsthesia—
Novocain with Mannitol.
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D. Novocain and Sodium Chloride
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F. Novocain only
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A solid compound of Hydrogen Peroxide.

Pergenol is the **non-irritant, surgical and dental Antiseptic,** and possesses all the advantages of Hydrogen Peroxide presented in a solid, stable and compact form.

Pergenol Powder dissolves easily in water, furnishing a neutral solution of Hydrogen Peroxide and Boric Acid.

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Proprietors of JAGO & JEROME

Perfume Manufacturers

ALL CLASSES.

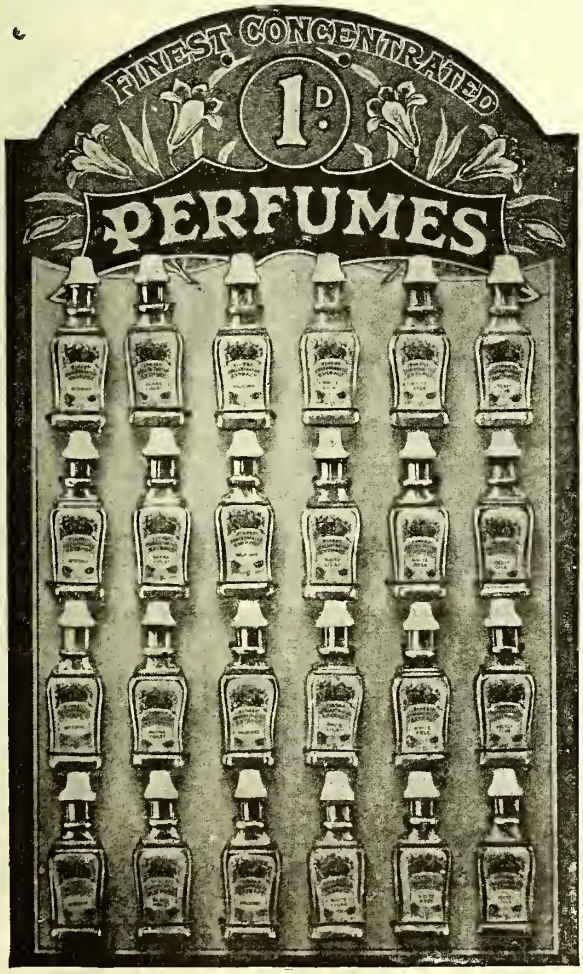
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4-oz. Bottles, 33/- 10-oz. Bottles, 66/- per doz.

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Quality and Price beat all Competitors.

ESSENTIAL OILS.

Almonds	Orris root
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Bergamot	Petit-grain
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Nos. 24, 36, 72 & 240.

CASTOR OIL, OLIVE OIL, FLORAL WATERS, PERFUMED OILS.

NATURAL FLOWER PRODUCTIONS.

Sole Agent:
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Inodorous fixative. Best solvant for Artificial Flowers, Oils, and Non-alcoholic Perfumes.

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Chief constituent of Jasmin.

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First-class Artificial Scents.

Rose, Neroli, Ocillet, Iris, Mayflower, Violet, Lilac, Hyacinthe, and others.

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DELVENDAHL & KÜNTZEL

Werder a. Havel, near Berlin, GERMANY.

Peachkernel Oil

Guaranteed Pure.

OUR branch factory being situated right in the centre of the peachkernel district, we are exceptionally well placed for producing the best oil at the lowest cost.

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ESTABLISHED 1833.

STAFFORD ALLEN & SONS

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Essential Oil Distillers

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ALLEN'S

Green Extracts

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SYNTHETIC OTTO of ROSE

"TIGER" BRAND.

ALMOST

Equal to the Natural Otto.

Wholesale only from:—

The Crown Chemical Works, Ld.
STRATFORD, LONDON, E.

A Chemist writes:

"The artificial Otto of Rose you supplied me with a short while ago is excellent. I prefer it to real Otto, it seems sweeter and more lasting. I showed it to a traveller carrying another sample of artificial Otto, by the way, the other day, and he was quite unable to tell it from real Otto."

"The Chemist and Druggist," Dec. 17th, 1910, writes:

"Artificial Otto of Rose.—The Crown Chemical Co., Ltd., Stratford, London, E., sent us a sample of their artificial Otto of Rose—a very sweet and faithful imitation. At the same time we received for inspection the original of the testimonial which the Company print in their advertisement in this issue. We endorse the pharmacist's verdict."

Price List of Synthetic Esse tial Oils, Flavourings, Colours, &c., on application.

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(ESTABLISHED HALF A CENTURY.)

MANUFACTURING PHARMACEUTICAL CHEMISTS.

Distillers of Essential Oils and Cultivators of Medicinal Plants.

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SOLID & LIQUID EXTRACTS	SCAMMONY RESIN	ALOIN	EUONYMIN
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ESSENTIAL OIL of LAVENDER	ELATERIUM	DRIED MEDICINAL LEAVES	
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International Exhibitions—London, 1862; Chicago, 1893. Prize Medals awarded for Pharmaceutical Extracts, Essential Oils, and Dried Herbs of Superior Quality. Also Award at the Paris Exhibition, 1867.

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Best Quality Only.

RANDALL & SON,

Limited.

Wholesale and Export Druggists,

SOUTHAMPTON

Royal Vinolia.

Most probably the sign of the Royal Vinolia Depot already appears on the window of your pharmacy as it does on the windows of the great majority of chemists throughout the country. If this is not the case, may we remind you that you are missing a splendid and unusually favourable opportunity for increasing your trade.

This is the Sign of the Royal Vinolia Depot.



Vinolia Company Ltd
BY APPOINTMENT
TO HIS MAJESTY THE KING.
Royal Vinolia
Soaps Toilet Luxuries and Perfumes
"All alike Perfect" and All Here Always
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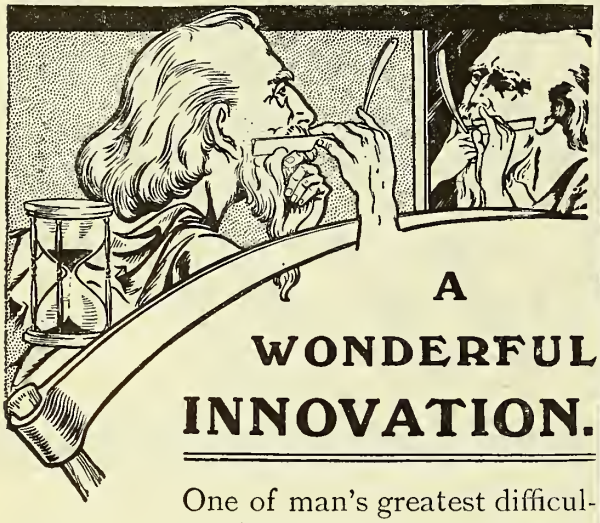
The Royal Vinolia Toilet Luxuries, by means of their superb quality, general attractiveness of get-up, and being backed by extensive advertising, are securing a ready and increasing sale. Our terms offer a substantial margin of profit on all lines, while the high standard of quality maintained throughout ensures the regular custom and satisfaction of all your clients.

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THE BEST OFFER EVER MADE.

Address :— V. M. D. DEPT., VINOLIA COMPANY LIMITED, BEBINGTON, BIRKENHEAD.

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A WONDERFUL INNOVATION.

One of man's greatest difficulties has been solved—his daily shave which up to the present has been a daily nuisance and waste of time now becomes a pleasure—How, you ask ?—by using our latest innovation:—

"QUICKSHAVE"

A few drops of "Quickshave" on a soft brush rubbed gently over the beard produces a fragrant creamy lather—softens the beard and dispenses entirely with lathering—

It is free from alkali or any irritating ingredient. It is soothing, healing, and comforting to the skin. It requires neither soap, water, nor lathering. It saves you fully three minutes per shave.

The first advertisement we plaeed with the press brought in over 3,000 orders—this did not surprise us—but we hardly expeeted within three weeks to reeeive hundreds of unsolieited testimonials.

"Quickshave"

is going to revolutionise the present method of shaving—we are creating the demand—are you preparing to satisfy the demand?

"QUICKSHAVE" is sold in **6d.** and **1/-** collapsible tubes, send post card for trade terms, and DO IT NOW.



THE ELITE TOILET CO.,
The County Chemical Works,
BIRMINGHAM.

DAGGETT & RAMSDELL'S

PERFECT COLD CREAM.

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1/- "	**8/4**	"
2/- "	**18/9**	"
1/6 Jars	**12/6**	"
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3/6 "	**29/2**	"
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Buyers of 3 doz. bottles receive 3 bottles gratis (may be assorted and any size).
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Do. 12 doz. do. 18 bottles gratis.
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Toilet Jelly,
Shaving Stick.

Peerless Toilet Preparations,
Unrivalled for the Complexion,
Softening & Beautifying the Skin.

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THERE is not much wisdom in wasting all your energy and capital on lines that the Public need only occasionally. But if you look round you will see that best part of your stock is only bought when people are forced to buy it. The majority of your lines do not represent regular sales to individual customers.

"Harlene" is not one of those, for in addition to it being the most popular and best selling Hair Cultivator it is the most elegant article of Hair Toilet Requisites produced.

In colour, composition and actual use, "Harlene" is elegant and therefore attractive, and being a Real Requisite of the Toilet a sale once introduced would be as frequent as a staple line of washing soap.

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No. 1 size ...	1/- ...	11/- doz.
„ 2 „ ...	2/6 ...	27/3 „
„ 3 „ ...	4/6 ...	47/- „

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	Retail	Wholesale.
No. 1 size ...	1/- ...	11/- doz.
„ 2 „ ...	2/6 ...	27/3 „

"CREMEX." Shampoo Powders.

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1/-	11/- doz.

Per box of 7 Powders.

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one of our latest Mirror Showcards? This illustration is really an injustice to the charming lady as well as the artistic design, and we feel sure it would appeal to your sense of the beautiful. It would make a most attractive centrepiece for your counter or window, and it will be sent quite

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'CREMBAS' - 1 ounce. Borax - 12 grains. Distilled Water - 5 ounces.

Melt the 'CREMBAS' on a water-bath or over a slow fire, add gradually the water in which the borax has been dissolved, beat into a cream, and perfume with lilac, rose, essence of violet, lily of the valley, or any odour desired.

For further information, see Inset in Supplement to "The Chemist and Druggist," July 30th, 1910.

A sample pound package sent free by post to any part of the United Kingdom for 2/6. Makes 5½ dozen of six popular specialities to sell retail at £2 : 3 : 6. To India and the Colonies, extra postage.

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Dental & Toilet Preparations

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33⅓ PER CENT. is the GUARANTEED PROFIT on the LEADING LINES of the CAR-MA-ME PREPARATIONS.

Liq. Germicide Car-ma-me	2/6	Dentifr. Liq. Car-ma-me	1/-
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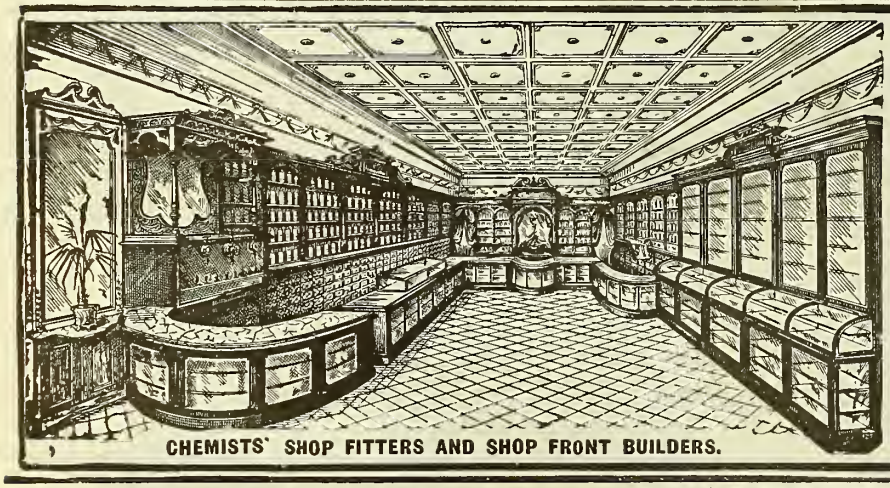
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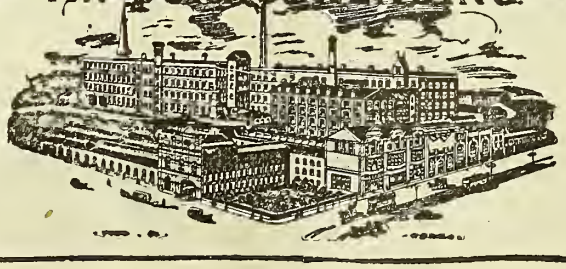
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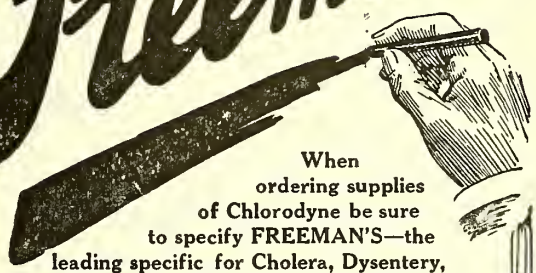
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PHARMACEUTICAL FORMULAS. (New Edition.) 10/-, by Post 10/6.
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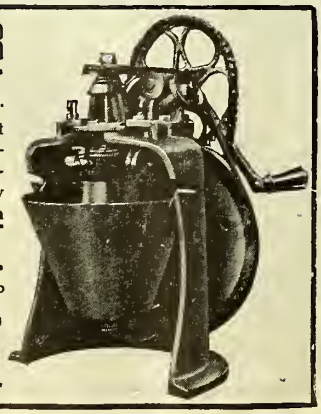
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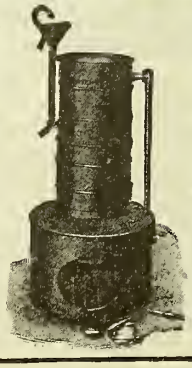


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Combined Stand and Gas Burners for these two sizes, 3/3 each.	
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Steam heated any pressure.	
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FOR SCIENTIFIC EXCELLENCE

"VASELINE" HAIR TONIC

Delicately perfumed, for preserving and restoring the strength, vitality and beauty of the hair. It will prevent dandruff and keep the scalp clean, sweet and healthful.

1/- size, **9/-** doz.; **2/-** size, **18/-** doz.; **3/-** size, **27/-** doz.

The word "VASELINE" is the Registered TRADE MARK of the

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GOLD MEDAL AWARDED HEALTH EXHIBITION, LONDON.

The *British Medical Journal* says: "Benger's Food has by its excellence established a reputation of its own."

FOOD FOR INFANTS

INVALIDS AND THE AGED.

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ARE YOU SATISFIED YOU HAVE THE BEST?

For years we have made a speciality of Lanoline, Cold Cream, Camphor Ice, and Camphor and Euc. Ice in 1d., 2d., and 4d. Tins—Liebig's Extract of Beef—Toilet Creams in Tubes —Menthol Inhalers and Novelties for the Indoor Season.

Quality & Attractiveness are our chief thought

and we are anxious to submit Samples to substantiate all we say. Meanwhile, to obtain a better idea of what we can do, we ask:

WILL YOU WRITE FOR OUR WINTER LEAFLET WHICH IS CERTAIN TO PROVE INTERESTING?

THOS. CHRISTY & CO. OLD SWAN LANE, **LONDON, E.C.**

THE CHEMIST AND DRUGGIST

A Weekly Journal of the Chemical and Drug Trades and of British Pharmacists throughout the Empire,
ESTABLISHED 1859.

The CHEMIST AND DRUGGIST is the leading journal addressing the chemical and drug trades of the British Empire. It is adopted as an official journal by nineteen Chemists' Societies in Australia, Ireland, New Zealand, South Africa and the West Indies, and its paid-in-advance circulation in Great Britain and all Countries having business relations with the British Empire is intrinsically and numerically unique.

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Terms for advertising in THE CHEMIST AND DRUGGIST can be obtained on application to the Publisher at the

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TWO AND A HALF MILLIONS.

This represents, in pounds sterling, the increase in the export of chemicals, drugs, etc., from Great Britain for the nine months ended September 30 as compared with the corresponding period in 1909. The exact figures are:

1909	1910	1911
£12,314,652	£13,632,688	£14,857,191

The export of medicines alone is also steadily increasing, as the latest official returns show:

1909	1910	1911
£1,247,643	£1,366,023	£1,431,941

There can be no question but that

THE CHEMISTS' AND DRUGGISTS' DIARY

contributes to that increase, for it sells chemicals, drugs, medicinal preparations, toilet articles, etc., all the year round. If you have not already secured space in the advertisement section you are neglecting an opportunity of sharing in the nation's increasing prosperity. Write without further delay to the Publisher, 42 Cannon Street, London, E.C.

Summary of this Issue.

The more notable items only are dealt with.

Articles and Communications.

Hydrastinine has been synthesised (p. 74).

Principal Cowley writes in regard to the cultivation of medicinal plants in Queensland (p. 86).

Stamped medicines are giving retailers trouble at present, and all should read the note on p. 72.

Mr. Arthur Bailey describes half-a-dozen ways to dress chemists' windows at this season (p. 73).

Mr. A. C. Abraham makes some interesting observations on tr. opii and the colour of ext. cannab. ind. (p. 78).

Messrs. Parke, Davis & Co., replying to Mr. Grier's observations on ergot-testing, show that the accuracy of the cock's-comb method is proved (p. 85).

In "bettering business" it is necessary to know what is quite new, and the notes on pp. 63-65 will help in that direction. They are about the most recent trade novelties.

The mixture of salts analysed by our students this month contained Ca, K, Na, CO_3, SO_4, and H_2PO_2. Dr. Dobbin gives useful hints on the detection of a hypophosphite (p. 52).

A scheme for a State dental service is outlined on p. 72. The author recognises that the number of qualified dentists is insufficient for the needs of the people, and suggests a lower qualification.

The Report of the Commissioners of Customs and Excise for 1910-11 is issued this week, and we comment upon it on p. 71, showing how chemical industry is improving under the new alcohol *régime*; also that the sale of medicine stamps was better.

The first steps for the American invasion of the British retail drug-trade were made at the United Drug Co.'s Convention in Boston, which is the subject of a special illustrated article beginning on p. 57. It is reported that a New York company also contemplates starting drug-stores here (p. 53).

News of the Week.

Captain Craig has dropped his Bill amending the Irish Pharmacy Acts (p. 66).

An interesting note on matches is included in our report of the Chemical Society's meeting on p. 66.

Several gentlemen connected with the chemical and drug trades have been elected to municipal offices (p. 54 and p. 62).

Dr. George Coull and Mr. J. Innes Fraser have been nominated for election to the Pharmaceutical Board of Examiners for Scotland (p. 67).

Mr. Robert Gibson, Ph.C., Manchester, the originator of chlorodyne lozenges and head of the well-known house of lozenge manufacturers, died with tragic suddenness on Wednesday (p. 61).

A West-end chemist had to answer, at Bow Street on Thursday, summonses in respect to the sale of twenty-four dutiable articles unstamped. He was fined 20*s.* for each, and costs (p. 59).

Chemists' Associations have now fairly started the new session, and we report a considerable number of meetings, prefacing the section with a portrait of the President of the Fifeshire Association, Mr. David Gilmour (p. 75).

The House of Commons Session was resumed on Tuesday. We report several points in regard to the National Insurance Bill. One member is urging the Government to get the Pharmaceutical Society to recognise Colonial certificates for dispensing under the Bill. Mr. Glyn-Jones may not get an opportunity to put his clause regarding pharmaceutical committees, but the Government may take it up. Mr. Worthington Evans was assured by Mr. McK. Wood on Thursday as to apothecaries' assistants (pp. 65-6).

Trade and Market Matters.

The famine in menthol in London has this week led to unprecedented prices being paid by consumers. November and December are the principal months of arrival of new crop, and the feeling is that there will be a decided break shortly (p. 70).

Numerous price changes have occurred on the markets, but the bulk continue in favour of sellers. Spot menthol has jumped to 30*s.*, santonin is 4*s.* 3*d.* dearer, Chinese rhubarb and anise oils are active and dearer; Japanese peppermint oil, vanilla, morphine, cassia oil, and copper sulphate have also advanced. Articles favouring buyers include the Sicilian essential oils, jalap, arsenic, cloves, valerian, euphorbia, and chamomiles (p. 81).

CORNER FOR STUDENTS.

Conducted by Leonard Dobbin, Ph.D.

All communications for this section should be addressed thus: "Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

Report on October Analytical Exercise.

THE powder distributed to students on September 25 contained 6 parts by weight of calcium carbonate, 3 parts of potassium sulphate, and 1 part of sodium hypophosphite. The calculated composition of such a mixture is:

Ca	24.0
K	13.5
Na	2.6
CO_3	36.0
SO_4	16.5
H_2PO_2	7.4
	100.0

The powder further contained, as impurities, distinct traces of magnesium, chlorine, and siliceous matter, also a recognisable trace of iron, all present in the calcium carbonate.

Samples of the powder were distributed to twenty-three students, and eleven reports were sent in for examination. The writers of the reports all detected the presence of calcium and of the sulphuric acid radical. The failures in the detection of the other constituents were: (*a*) Metallic radicals: Potassium, 5; sodium, 3. (*b*) Acid radicals: Carbonic, 2; hypophosphorous, 5.

While the analysis of this powder was in other respects very simple, the presence of the hypophosphite introduced certain complications, which rendered the exercise, as a whole, distinctly less simple. Some of our correspondents who recognised the evolution of hydrogen phosphide when the powder was heated in a dry tube, and who correctly attributed this to the presence of a hypophosphite or a phosphite, made the analysis considerably more difficult than it need have been by subsequently oxidising the hypophosphite to the condition of a phosphate at the stage at which boiling with nitric acid is customary in order to convert ferrous compounds into ferric, and in this way necessitating a phosphate separation. This complication could have been avoided if the hypophosphite had first been separated in the water-soluble portion of the mixture from the insoluble portion. After thorough washing of the latter with hot water, simple solution of a small quantity of it in nitric acid and application of the ammonium molybdate test would have shown that it was free from phosphoric acid, and that it might be analysed by the ordinary method for non-phosphate mixtures. The exercise was thus an excellent example of a mixture in the analysis of which a considerable amount of time and trouble could be saved by preparing an aqueous extract and then submitting this and the matter insoluble in water to separate examination.

Another way in which the hypophosphite introduced some difficulty was by obscuring the test for a chloride by means of silver nitrate. Several students reported the presence of a trace of a chloride as impurity, but we are not sure that more than one really established its presence by the tests applied. When silver nitrate was added to a nitric-acid solution of the powder a greyish-white precipitate was at once produced, and this darkened slowly on standing and more rapidly on heating. As this behaviour was certainly due chiefly to the hypophosphite, and as it would effectually obscure the formation of silver chloride in small quantity, it became a matter of importance to prove conclusively that the latter was or was not precipitated simultaneously. This was not altogether a simple thing to do, since it was necessary to get rid of the hypophosphite entirely, and that by a process which not only could not introduce a halogen-acid radical, but which would not eliminate the chloride if traces of such were really present. The method which we found to give the best and most rapid result was similar to that suggested by Jowett ("Year-book of Pharmacy," 1898, p. 422) for testing the purity of hypophosphites, and consisted in boiling a small quantity of the powder for five minutes with a mixture of nitric acid and water in equal proportions by volume, adding a few drops of silver nitrate solution, and again boiling for five minutes. By this treatment the hypophosphite was completely oxidised to phosphate, and the silver nitrate then produced a slight but distinct white precipitate which was not changed in appearance by the second boiling, but which darkened on exposure to light, and otherwise showed the properties of silver chloride. Separate examination of the sodium hypophosphite and of the calcium carbonate which were used in preparing the mixture showed that the former was quite free from chloride, while the latter contained a well-marked trace as impurity.

Several correspondents were misled into supposing that the powder contained a sulphite in consequence of still another complication introduced by the hypophosphite. On heating the original substance with concentrated sulphuric acid, acid fumes were evolved which consisted, in part, of sulphur dioxide. This, however, was merely a reduction product of the sulphuric acid, and was not evolved when the powder was heated with dilute sulphuric or hydrochloric acid. In one or two cases reactions taken to confirm the presence of a sulphite were really due to the hypophosphite.

The powder contained a distinct trace of magnesium, but this was not sufficient to account for magnesium being reported as a chief constituent by a few students. In some cases incomplete precipitation of calcium as carbonate seems to have been responsible for its precipitation as phosphate when sodium or ammonium phosphate was added as a test for magnesium.

Omission to apply any test for alkali-metals at the proper place and exclusive reliance on the application of the flame test to the original substance for their detection are both much too common, and are the cause of many easily avoidable errors.

Prizes.

The First Prize for the best analysis has been awarded to

Fred Brindle, 13 St. Helens Road, Bolton.

The Second Prize has been awarded to

H. C. Walker, 151 West Park View, Tyne Dock.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

Marks Awarded for Analyses.

1. *Correspondents who are unqualified*:

Fred Brindle (1st prize)	94	Student	65
H. C. Walker (2nd prize)	91	Virus	59
Novo	90	Cheshire	29
W. W. W.	84	R. L. B.	28
Rego	67		

2. *Correspondents who are qualified*:

Nitrax	93	Xerxes	89

To Correspondents.

Fred Brindle.—We are not quite clear as to why you failed to get a precipitate with ammonium molybdate on boiling this reagent and nitric acid with some of the original solution to which hydrogen sulphide had been added and from which the latter had been boiled out subsequently. The failure was probably due to the presence of hydrochloric acid and other chlorides; but in any case its occurrence may lead you to study the conditions requisite for the success of the molybdate-test. Compare the general remarks above.

H. C. Walker.—You found phosphoric acid in the course of your systematic analysis, but, while you omit to include it in the summary of constituents detected, you do not adduce any evidence to show that it was not present in the original powder. The indications which you supposed to show the presence of a sulphite were due to the reducing action of the hypophosphite on concentrated sulphuric acid. Study carefully the general remarks above.

Novo.—The powder did not contain any ammonium compound. The bromine-water which you added in testing for a sulphite probably contained free sulphuric acid in small

proportion (see *C. & D.*, September 2, 1911, index folio 368, paragraph 10). Read the reply immediately preceding.

W. W. W.—Although the proportion of sodium present was not large, it should not have escaped detection if the flame-test had been applied at the proper stage.

Rego.—You do not appear to have observed the characteristic odour of hydrogen phosphide when the powder was heated in a dry test-tube, and you seem to have missed potassium simply through omitting to test for it.

Student.—Compare the second sentence of the reply to "Novo."

Virus.—The powder did not contain a zinc compound. The reaction with silver nitrate which you supposed to indicate the presence of a sulphide, was no doubt due to the hypophosphite. When you added ammonium carbonate as a group reagent, it is by no means clear that you added this reagent in excess; and from the fact that the subsequent addition of sodium phosphate produced an apparently abundant precipitate, it seems more than likely that the calcium had not been completely precipitated.

Cheshire.—Boiling a mixture with sodium hydroxide (instead of with sodium carbonate) in preparing a solution to be tested for acid radicals is, as a rule, inadvisable. You will learn a good deal by a careful study of the general remarks above, and of the replies to other correspondents. In the meantime practise and persevere.

R. L. B.—We cannot suggest how your sample of the powder became mixed with some impurity which gave with ammonium hydrosulphide a black precipitate which you took to be nickel sulphide. No such contamination took place prior to its despatch to you. Apparently you tested for a chloride in a portion of a solution prepared by treating the original powder with hydrochloric acid!

Xerxes.—You do not state how you applied the ammonium-molybdate test for a hypophosphite, which failed to give you a positve result. In our own practice we have found it best to add an aqueous solution of the substance to be tested to a previously prepared mixture of aqueous ammonium molybdate and sulphurous acid, and to set the whole aside for some time, when the blue colour slowly appears. We experienced no difficulty in obtaining the reaction with the aqueous extract from this month's exercise by following the above procedure. The nitric-acid solution of ammonium molybdate, intended for the test for phosphates, must not be used in this test for hypophosphites.

Nitrax.—The precipitate which you took to be aluminium hydroxide was most probably the siliceous matter present as impurity in the calcium carbonate. Read the reply to "Fred Brindle."

INDIA AND THE EAST.

(From the "C. & D." Correspondents.)

Mr. F. W. Franks, representing the "Sanitas" Co., Ltd., left by the s.s. *Mongolia* on Friday, October 20, for a tour in the East. He will be in Colombo on November 11, Madras November 27, Bombay December 11, Calcutta December 27, Rangoon January 23, Penang February 4, Singapore February 9, Bangkok February 27, Hong-Kong March 28, Shanghai April 15, Kobe May 1, and Yokohama May 6. On his return he will be in Marseilles on July 7, and hopes to arrive in London the following day.

Betel-chewing in Siam.—The advance of Western civilisation in Siam has led to a decrease in betel-chewing, and an attempt has been made to introduce American chewing-gum as a substitute. The demand for this article is as yet small. The green leaf of the betel pepper, smeared with red lime, together with tobacco, catechu, and the areca-nut, make up the material used in betel-chewing. The habit is universal among the Siamese, especially among the women. Siam does not produce enough betel-nut for home consumption, but imported 5,288,416 lb. from India, Singapore, and Java last year.

First Danish Lady Pharmacy Proprietor.—Fraulein Virginia Petersen, who, in conjunction with her *fiancé*, Herr O. Schmidt, recently acquired the pharmacy of Roedby, Denmark, will be the first lady pharmacist proprietor in Denmark. Of the fifty female pharmacists in Denmark none has hitherto passed the stage of pharmacist's assistant, most of them taking the first stage of the examination only, and being content to remain assistants.

ENGLISH AND WELSH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

It is stated that the Riker-Hegemann Co., of New York, contemplate starting a series of American drug-stores in England.

The Chapel-en-le-Frith Guardians have decided that in future all drugs required for the workhouse shall be obtained from local chemists.

At Maidenhead Police Court on October 23, Mr. J. H. Northey, chemist and druggist, 4 Castle Hill, was one of the special constables sworn in.

Plans for considerable additions to the factory of Allen & Hanburys, Ltd., manufacturing chemists, Ware, have been passed by the local Urban Council.

At a meeting of the Cardiff Chamber of Trade on Tuesday, October 24, Mr. A. Hagon opposed a motion for delay of the National Insurance Bill, and carried his point by a majority of one.

The premises of Mr. J. F. V. Field, chemist and druggist, 117 Chorley Road, Swinton, Lancs, were broken into during the night of October 18, but the intruders were apparently disturbed, as nothing was stolen.

Two men, George Groves (53), Samuel Berry (35), both of Old Ford, were overcome by fumes, on October 25, at Messrs. Forbes, Abbott & Lennard's ammonia-works, Sussex Wharf, Blackwall Lane, East Greenwich, and lost their lives in consequence.

The "Thornbury Gazette" is publishing the "Personal Recollections of Weather and Events, and General Reminiscences," of Mr. J. Spencer Palmer, chemist and druggist, Thornbury. These begin, in the issue of October 14, with the year 1857, and 1870 is reached in the following Saturday's "Gazette."

A presentation was made at the Wellcome Chemical Works, Dartford, on Wednesday, October 25, by the general manager, on behalf of the firm, to Miss Bass, who received a gold bracelet on the occasion of her leaving the firm after nineteen years' continuous service. Mr. Charles H. Crayden also received a suitably inscribed presentation watch on the completion of twenty-one years' continuous service.

The "British Weekly" reports that Councillor J. C. Pentney was one of the Hackney passive resisters who appeared recently before the local Magistrates to protest against payment of the education rate. Councillor Pentney is Secretary of the League, and he told the Magistrates that he and other defendants were "peaceable, law-abiding citizens, but they felt bound to protest as long as the 1902 Act existed."

The dissolution of the City Polytechnic in 1907 rendered necessary a new scheme for the management of the Northampton Polytechnic Institute, Clerkenwell, London, E.C. This scheme has now been sealed by the Charity Commission. The principal matter of public interest arising out of it is that it gives the Governors power to appoint a President of the Polytechnic, and in accordance with these powers the Duke of Connaught, K.G., has accepted the new office.

At an inquest held at Wakefield on October 18 touching the death of Elias G. Ward, pony driver, Streethouse, who was fatally burned while mixing nitric acid and mercury for plating his bicycle, deceased's father stated that his son had not been told that the mixture is dangerous. Detective Sheard said that Mr. Whaley, chemist, Kirkgate, who supplied the ingredients, informed him that the father, on questioning, replied that his son knew how to use the mixture. In returning a verdict of "Accidental death," the jury made the suggestion that great care should be taken in selling dangerous substances to ignorant people.

Church Missionary Society Doctors.

We are informed that Dr. C. F. Harford has just been transferred from the post of Physician to the Church Missionary Society to that of Secretary to the Medical Committee in the room of the late Rev. Dr. Elliott. How

considerable is this particular work which is carried on by the Medical Missions of the Society may be gathered from the fact that there are ninety-one qualified doctors on the staff, of whom twenty-seven are women, and seventy-three trained nurses. The Society maintains in various part of the world no fewer than fifty-six hospitals, with 3,409 beds; the number of in-patients received in the course of last year was 32,527; and at the forty-eight medical missions, with their affiliated dispensaries, considerably over one million visits were paid by out-patients. This, of course, leaves out of account the extensive medical work of a simple character which is carried on by the various missionaries, who have received nothing more than an elementary training and who do not work under the supervision of a qualified doctor.

Contracts.

Pontefract Guardians.—Reynolds & Branson, Ltd., for drugs.

Islington Guardians.—Liebig's Extract of Meat Co., for a supply of extract of meat at 2*s.* 8*d.* per lb.

Newport Pagnell Rural District Council.—Mr. F. W. Taylor, chemist, Newport Pagnell, for disinfectants.

Hertford and Ware Joint Hospital Board.—Mr. J. H. S. Lewis, chemist and druggist, Ware, for medical sundries during the ensuing six months.

London County Council.—For asylum supplies: Liebig's Extract of Meat Co., Ltd., for extract of beef at 156*l.* 7*s.* 8*d.*; Nestlé and Anglo-Swiss Condensed Milk Co., condensed milk (item 1) at 109*l.* 9*s.* 6*d.*; Fussell & Co., Ltd., for condensed milk (item 2) at 147*l.* 12*s.*; Evans Sons Lescher & Webb, Ltd., for lime-juice at 329*l.* 8*s.* 9*d.*

Analysts' Affairs.

The Woolwich analyst in his last quarterly report states that three samples each of quinine-wine and of cod-liver oil were examined and found to be genuine.

The past and present members of the staff of the Sheffield city analyst (Mr. G. E. Scott Smith) held their annual reunion at the Grand Hotel, Sheffield, on October 20. The gathering was the most successful yet held, the company including Mr. John Evans (public analyst for York), Mr. A. R. Tankard (public analyst for Hull), and Mr. S. E. Melling (public analyst for Wigan).

The Rochdale analyst, in reporting on the samples of soda-water taken for analysis, states that several samples seem to show that crude methods of manufacture are still in vogue. One sample was almost destitute of carbonic-acid gas, while others were deficient in bicarbonate of soda or contained traces of lead in solution. In two instances either dirty bottles or unfiltered water had been used.

The Public Weal.

The following gentlemen are seeking election on their respective town councils:

Mr. Robert G. Murray, manufacturing chemist, One Ash, Hyde Road, Gorton, Manchester.

Mr. John Jones, chemist and druggist, 102 Cross Lane, Salford.

Mr. L. Heap, chemical manufacturer, Bacup.

Mr. W. H. Martin, manufacturing chemist, Lincoln.

Mr. W. Atkins, chemist and druggist, 126 Raby Street, South Byker, Newcastle-on-Tyne.

Mr. R. March, chemist and druggist, 5 Rutland Terrace, Stamford.

Mr. T. C. Lamb, Ph.C., "Tintagel," Maidstone Road, Chatham.

Mr. A. E. Ekins, Ph.C., F.I.C., County Laboratory, St. Albans.

Mr. H. Milner Black, Ph.C., St. James's Street, Brighton.

Mr. Charles Jenkin, chemist and druggist, 86 Lower Bristol Road, Bath.

Midland Notes.

Mr. William Izon, of Aston New Town, gave an interesting lecture on "The South Coast of England: Its History and its Beauty Spots," at the Stratford Road Council Schools last Sunday.

Great Barr Hall, the historic mansion of the Scott family, and *rendezvous* of the greatest *savants* of the day, passed into the hands of the West Bromwich Guardians, being sold by auction for 28,500*l.*

In the attendances list of the members of the City Council, Alderman Clayton made 219 out of 260, and Councillor Poole 64 out of 67 calls. Mr. Josiah Austin, a co-opted member, made 1 attendance and once called, and Mr. F. Barlow 7 out of 10.

After very many years the Midland Pharmaceutical Association has secured on its Council a well-known pharmacist from Leamington, Mr. Davis, whose family have been pharmacists there for nearly a century. Most of the pharmacists of this celebrated spa were members of the local association in Mr. J. T. Barrett's day.

Wolverhampton is in the throes of an epidemic of measles, and pharmacy and medicine are profiting thereby. At the monthly meeting of the Education Committee, Dr. Deanesley allayed the fears of these gentlemen by saying that measles "appeared to be an ancient disease, for one authority had stated that Moses suffered from it."

The staff and employés of Camwal, Ltd., Birmingham, on October 13, presented Mr. R. Groome with a silver cigarette-case, suitably inscribed, as a token of their respect and esteem, on his resigning the management of that branch. The hope was expressed that, with the prospect of a less strenuous life, Mr. Groome's health might take a decided turn for the better, and that he might be spared for many years to take an active part in the management of Camwal, Ltd. Mr. Groome, in acknowledging the gift, referred to his long association with Camwal, Ltd., having been at one time manager of three branches—viz., Manchester, Birmingham, and Bristol. He stated that he would be pleased to welcome any of his old employés at his model factory at Bristol.

Fire and Explosion.

Flames were seen issuing from a gas-meter by a boy at work in a cellar below the branch of Boots, Ltd., at 599 Attercliffe Road, Sheffield, on the evening of October 23, and the fire-brigade was called in. Chemical extinguishers worked from the pavement outside the shop were used to quell the conflagration, and after the fire had been subdued fireman Thompson entered the cellar, and reported that "all was right." Other firemen followed, and they were just about to knock up the fused gas-pipe when the explosion occurred. Superintendent Frost, who was on the pavement near the cellar grating, was flung right across the causeway and almost buried in *débris*, including fragments of the large window which had been blown out. Luckily he escaped with a severe shaking. Four firemen were so severely burnt that they had to be given medical treatment. Several people were cut by flying fragments of glass, and a boy, while trying to escape injury, had his foot severely crushed by a passing tramcar. A fresh outbreak of fire followed the explosion, but was quickly put out. The damage is estimated at 300*l.* A curious feature of the fire is that a tank nearly full of methylated spirits which stood near the gas-meter was not at all affected by the explosion or the subsequent fire.

Nottingham Notes.

Last Thursday Nottingham Thursday United F.C. beat Marsden's Reserves by 3 goals to 1.

Mr. Albert Eberlin, chemist (of Waterall & Eberlin, Chapel Bar), is opposing Mr. Sheriff A. R. Atkey in the Municipal election.

The "FitzHugh" Lodge of Mark Masons was dedicated at West Bridgford Masonic Hall last night (Tuesday), when members of Grand Lodge from London attended for purposes of dedication. The Lodge is named after Alderman R. FitzHugh, J.P., in recognition of the high esteem and respect with which he is regarded by his Masonic brethren of the province of Nottingham, he being the Provincial Grand Master of Mark Masons.

Secret Commissions.

A conference convened by Mr. Stanley Machin, Chairman of the London Chamber of Commerce, was held at the Mansion House, London, on October 23, with the object of assisting the Secret Commissions and Bribery Prevention League. Representatives of many large commercial undertakings were present. Sir Edward Fry, President of the League, wrote stating that Christmas-boxes were often mere bribes the payment of which was postponed in order to throw the pleasant veil of Christmas

over the transaction. Mr. David Howard, in a characteristic speech, moved the following resolution :

"This Conference, being of opinion that bribery is still rampant and corrupting all classes, is convinced that national support is urgently needed for the work of the Secret Commissions and Bribery Prevention League (Incorporated) in educating public opinion, and, where necessary, instituting proceedings under the Prevention of Corruption Act, and trusts that those who sympathise with the objects of the League will endeavour to assist in their attainment by becoming members."

The resolution was carried unanimously.

From Various Courts.

At Boston County Court on October 20, Mr. T. B. J. Booker, chemist and druggist, Mainridge, Boston, sued Elizabeth Veall, widow, for 4*s.* 7*d.* for goods supplied. Defendant was ordered to pay the sum forthwith.

At Northamptonshire Assizes on October 23, sentence of four months' imprisonment was passed on John Cook, a Kettering railway clerk, for inciting his sweetheart, Rose Ellen Towell, to take certain drugs with felonious intent. The young woman died in Kettering Hospital last May.

IRISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

Sir Charles A. Cameron, C.B., Dublin, has been elected Professor of Chemistry to the Royal Hibernian Academy of Arts in Ireland.

On October 20, Messrs. R. M. Gray & Sons, Belfast, sold by auction the contents of the Laganview Drug Stores, Belfast, belonging to the liquidator of Messrs. John Clarke & Co., Ltd.

Mr. A. G. Campbell, late of Messrs. John Clarke & Co., Ltd., Belfast, has started business at Great Victoria Street, Belfast, as a maker of artificial limbs and medical and surgical appliances.

The hearing of the petitions for the confirmation of the scheme of arrangement in the liquidation of Messrs. John Clarke & Co., Ltd., chemists and druggists, Belfast, has been fixed for October 31, before the Master of the Rolls.

Mr. W. C. Dobbin, Ph.C., North Street, Belfast, has been elected a member of the Central Council of the Citizens' Association and a member of the committee of the Duncairn and Clifton Wards committees of the same organisation.

Mr. James M. Glover, the well-known conductor of the orchestra at the Theatre Royal, Drury Lane, London, whose reminiscences have recently been published was apprenticed to Mr. Cornelius Mannin, Ph.C., 2 Great Brunswick Street, Dublin, from 1875 to 1879.

The liquidator of Messrs. John Clarke & Co., Ltd., has applied for payment of 15*l.* stated to be due by the Balrothery Guardians for unreturned empties. The medical officers state that these have been returned, and the Clerk was instructed to write accordingly to the liquidator.

In condensing the remarks made by Mr. J. T. Lynne at the meeting of the Irish Chemists' Assistants' Association (*C. & D.*, October 21, index folio 616), an incorrect meaning seems to have been imparted. Mr. Lynne informs us that he neither said nor implied that the Council of the Pharmaceutical Society has any power to reject examination candidates.

At Londonderry on October 19 Patrick O'Donnell, was charged with breaking and entering the premises of Messrs. McCaul & Co., chemists and druggists, Ferryquay Street, and stealing 2*l.* 18*s.* 2*d.* Prisoner had formerly been in the employment of Messrs. McCaul as shop porter. The Court reduced the charge to larceny, and sent the prisoner to gaol for a month.

Montreal College of Pharmacy.—The examinations for the Major and Minor finished on September 25. There were fifteen candidates for the Major, and three were successful; while for the Minor there were seventeen candidates, and eleven passed.

SCOTTISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

Isabella Maclean, merchant, Gruinart, Islay, has advertised her intention of applying for a poison-licence.

One chemist in Dundee is said to have sold on a recent Saturday ten gross of cakes of soap, the kind that children obtain in exchange for a coupon and a penny. Other chemists have disposed of three or four gross each.

Mr. Thomas Harley, dispensing chemist, 29 High Street, Perth, has signalised his majority (twenty-one years) in business by issuing to his customers a type-written letter, with two brightly written folders about the business and his toilet-preparations.

Aberdeen.

The pharmacy formerly carried on by Mr. G. W. Findlay at 63 Urquhart Road has been sold to Mr. James Malcolm, chemist and druggist, late of Willesden Green, London, N.W.

The half-yearly report up to August 31, 1911, of the Northern Co-operative Co., Ltd., has just been issued. The position of the drug department is shown by the following comparison of results since its institution :

	Turnover £ s. d.	Net Profit £ s. d.	
1907	1,402 18 3½	402 7 3½	(one drug-shop)
1908 ... ... (Half-year)	1,237 19 2½	322 0 6	(an extra shop part year)
1909	1,782 7 8½	309 18 2	(two shops)
1909	1,071 12 6	248 3 3½	,,
1910	1,292 5 1½	182 1 7	,,
1910	1,686 1[illegible] 2½	114 0 3½	(four shops, two extra opened during 6 months)
1911	2,012 5 6	422 4 4½	(four shops)
1911	2,012 7 10½	310 17 10	(five shops, one 12 weeks open)

From the net profit has to be paid dividend on purchase amount—viz. :

	£ s. d.	£ s. d.	
1907 ... Rate 3*s.* 1*d.* on £1	216 5 9	leaving balance 186 1 6½	
1908 ... ,, 3*s.* 2*d.* ,,	196 0 4	,, 126 0 2	
1909 ... ,, 3*s.* 2*d.* ,,	282 4 2	,, 27 14 0	
1909 ... ,, 3*s.* 4*d.* ,,	178 10 0	,, 69 13 3½	
1910 ... ,, 3*s.* 6*d.* ,,	—	,, —	
1910 ... ,, 3*s.* 6*d.* ,,	—	,, —	
1911 ... ,, 3*s.* 6*d.* ,,	—	,, —	
1911 ... ,, 3*s.* 4*d.* ,,	—	,, —	

The dividend of the company has suffered a reduction of 2*d.* on 1*l.*, although the total sales in all departments have increased by 4,905*l.* 3*s.* 0¼*d.* No dividend is now paid on patent medicines, infants' foods, etc., so that the portion of turnover on which dividend is paid cannot be accurately reckoned. Other expenses which are not deducted previous to estimating the net profit are 5 per cent. due on share capital and a share of the general management expenses.

The Late Mr. Charles Kerr.

The funeral of the late Mr. Charles Kerr, Ph.C., Dundee, took place on Friday, October 20, in the cemetery on Balgay Hill, a beautiful spot at the west side of Dundee. There was a large number of medical men and chemists present, in addition to other representative townsmen to pay a last tribute of respect to the deceased gentleman. Among them were Professor MacEwan, Professor Stalker, Dr. Mackie White, Dr. Pirie, Dr. Macfarlane, and Dr. Young; Mr. Melville, Mr. Rosenweig, and Mr. Donald, of Mr. Kerr's staff, with Mr. Harley (Perth), Mr. Williamson (Dundee), Mr. Duff (Dundee), Mr. Milne (Dundee), and Mr. Barrie (Dundee), former assistants now in business; Messrs. John Gray, Jas. Russell, Wm. Doig, Wm. Cummings, H. J. Hunt, J. H. Thomson, T. S. Peebles, John Anderson, R. M. Lindsay, Wm. Walker, J. L. Doig, C. Stephen, J. L. Lindsay, J. P. Ferrier, and J. W. Robertson, chemists in Dundee; Mr. A. Naysmith (Arbroath), and J. Coates (Raimes, Clark & Co., Ltd., Edinburgh).

Edinburgh.

There is said to have been considerable competition for the late Mr. Laird's business.

Some good window-shows of extract of malt are in evidence just now. Several seasons ago, however, a local pharmacist had a display which was, as the phrase hath it, one of the best. Malt was the pervading theme. There was a large heap of malted barley, and this was surrounded by several sheaves of barley, while the remainder of the space was occupied by the finished product. A disaster almost overwhelmed the artistically conceived exhibit, but happily the danger was recognised in time. An obliging wholesale house had sent the chemist a supply of oats!

Glasgow and the West

Mr. Sam Wright, 308 Byres Road, Glasgow, has been appointed Scotch representative to Wm. Martindale, New Cavendish Street, London, as from November 1.

A new wholesale firm have started business at 93 Holm Street, Glasgow, under the name of The Borgue Chemical Co., wholesale manufacturing and export chemists.

Mr. D. S. Gowans has acquired his partner's share in the business carried on as McLean & Gowans, wholesale chemists, 556 St. Vincent Street, Glasgow, and is now sole proprietor of it.

FRENCH NEWS.

From the "C. & D." Paris Correspondent.)

M. Houssaye's Reminiscences.—How Henri Houssaye, the historian of "1815" (whose death was recently reported), first received those Napoleonic impressions which brought forth such remarkable literary fruit has been told before, but will bear repeating. "Among the first pleasures of my childhood," he wrote to a Parisian journal, "were the anecdotes of my maternal great-uncle, Professor A. Fée, who went through the Peninsular and Saxon campaigns as pharmacist-major. He retired in 1815, but in 1831 Louis-Philippe named him Director of the Strasbourg Jardin des Plantes. In March 1871 he left that city when the Germans took over the French School of Pharmacy on the annexation of Alsace." Could an historian have had a better preceptor in military literature or patriotism, especially as Fée was himself a man of literary tastes who had published several books?

The Odours of Paris.—Those who remained in Paris during the late torrid summer complained that the odours wafted by the wind from the north-east or thereabouts were not exactly those of "Araby the Blest." The Prefect of Police instructed M. Portier to examine and report as to the cause of this, and his report has just been published. The superphosphate manure industry has, it seems, been modified recently. The new processes are "more favourable to the production of odours." Add to this that immense stocks of manufactured manures are kept on the premises in these works. M. Portier advises the Prefect to insist on manufactured superphosphates being kept in hermetically sealed packages and handled under the same conditions, and to issue regulations regarding the use of means for destroying the evil-smelling gases which arise during the process of manufacture.

Trial by Jury.—The Parisian daily Press is indefatigable in organising new forms of amusement for the general public. "Excelsior," the penny illustrated daily, profited by the recent popular annual fête at St. Cloud to organise a competition between *camelots* (street hawkers). The prize was to be given to the vendor who most eloquently and convincingly put his goods before the jury—a specially empannelled one of shop-girls. The winner, "Leroy l'Algérian," appeared in zouave-like costume, with his tray of boxes of tooth-powder, and came in an easy first. Inspired by the gleaming ivories revealed by the smiles of the fair jury girls, his eloquence reflected their brilliancy. And, mindful of the old proverb that the proof of the pudding is in the eating, and that physical strength ever impresses the weaker sex, he finished by a conclusive demonstration of the soundness of his own teeth, by bending a halfpenny with a simple movement of the jaw.

A Gossip on Leeches.—In "Le Mois Littéraire et Pittoresque"—a popular illustrated monthly—M. Jacques Boyer tells the tale of the decline and fall of the French leech-trade. These vigorous little blood-suckers were once the object of flourishing business. Forty years ago there were ten wholesale leech-dealers at Paris, each of whom sold 300,000 or 400,000 of the interesting annelides per month, the average price being 10*l.* per thousand. Nowadays they only fetch 6f. or 7f. per hundred, and only one dealer has survived. M. Leya "handles" some 130,000 per month, his best market being the United States. He has sometimes as many as half a million in stock. The Assistance Publique (or Paris Poor Law Administration), which purchased 80,000f. worth per annum in early Victorian days, now buys for a beggarly 8*l.* a year. Fortunes have been founded in France on the leech-trade. The marshes round Bordeaux used to be the great breeding-ground. Old Béchade, a poor but wideawake peasant, created the industry. The wretched marsh land he rented for 12*l.* became worth 1,000*l.* when properly stocked with leeches. He purchased all the worn-out horses he could lay hands on, and drove them into the leech-marshes five or six times a month, especially in April, May, June, October, and November. Béchade died a millionaire in francs. The French market was ruined not only by the diminished demand, but by the fact that improved facilities for transport enabled leeches to be brought from more distant lands. They came by fast trains from Turkey, Bohemia, and Dalmatia, and in smaller numbers from Algeria and Russia.

SOUTH AFRICAN NEWS.

(From "C. & D." Correspondents.)

"The Chemist and Druggist" is regularly supplied by order to all the members of the seven Societies and Associations of Chemists in British South Africa, as well as to other chemists in business there.

Cape Province.

Prussic-acid Poisoning.—A Cape Town sanitary inspector, named William Hope, was found dead from prussic-acid poisoning in a Cape Town hotel on September 23. A verdict of suicide was returned at the inquest.

Business Pars.—Messrs. Martin Elgar, Ltd., have had their Cape Town offices and showrooms redecorated and furnished, and have increased their space. Rumour has it that two joint-stock concerns operating in South Africa, and registered at the Cape and Transvaal respectively, will amalgamate in the near future. Both companies act as agents of foreign firms.

Personal.—Mr. H. E. Cope, manager of the photographic department of Messrs. Heynes, Mathew & Co., Ltd., Cape Town, was installed as W.M. of the Wynberg Lodge, No. 2,577, E.C., on September 28. The previous W.M. was also connected with the drug-trade.—Mr. Albert Walsh, President of the Colonial Pharmacy Board and general manager of Messrs. Lennon, Ltd., London and South Africa, was *en route* for Cape Town when the mail left. He has been on vacation in Europe.

"Go North" was the advice of the late C. J. Rhodes to young men. To-day Cape Town appreciates the solid fact that the trade has gone north. Rhodesian druggists buy from Johannesburg now, whereas it was either Cape Town or Port Elizabeth a few years back. Merchants in the Transvaal and in Rhodesia have very little time for the "Mother City" from a business point of view; they content themselves by coming south on vacation once a year to admire the natural beauty and situation, but if you want to talk business with them, the answer comes in two words, "Nothing doing."

Port Elizabeth Floods.—On September 29 another flood was experienced at Port Elizabeth, but it was 4 ft. below the flood of 1908, when considerable damage was done to more than one drug-store, Messrs. C. E. Gardner & Co., Ltd., being the worst sufferers then. A telegram dated October 4 from Port Elizabeth to our Cape Town correspondent states that no damage was sustained by the drug-trade. The produce merchants at the lower end of the town were subjected to loss; but Messrs. C. E. Gardner & Co., Ltd., whose wholesale departments, laboratory, etc., are situated in this quarter, escaped without damage.

"Rexall."

Ninth Annual Convention of the United Drug Co. at Boston, Mass., which was attended by a "British Delegation" consisting of Mr. E. Carpenter (H. Hodder & Co., Ltd., Bristol), Mr. R. A. Robinson, past-President of the Pharmaceutical Society of Great Britain, Sir Thomas Robinson (Hayes, Conyngham & Robinson, Ltd., Dublin), Mr. J. W. Sutherland (Frazer & Green, Ltd., Glasgow), and Mr. Edwin Thompson (Thompson & Capper, Ltd., Liverpool and Manchester). The meeting commenced on Tuesday, October 3, lasting three days, 2,500 persons being present, including Canadian members, and the subjoined report is by a man who was there.

THE Convention was opened in the Arena, Boston, under the presidency of Mr. Louis K. Liggett, president of the company. Mr. Fitzgerald, the Mayor of Boston, welcomed the delegates to the city, and the Rev. A. H. Berle, Professor of Christian Ethics at Tufts College, opened the proceedings with prayer.

A Year's Progress.

In the course of his annual address Mr. Liggett stated that the present Convention was the largest yet held, also that the business had increased during the past year by 39 per cent. A new building and new floors to others had added 88,000 square feet to the company's manufacturing and warehousing facilities, while a candy-factory had been built in Boston, a branch candy place is to be opened at Atlanta, and another in St. Louis, besides other acquirements in the same line, all showing 39 per cent. on the investment. The Canadian factory (opened a year and a half ago) showed an increase of 101 per cent. during the past five months, thus beating the American one. A buying office has been opened in Paris. The net profits for the year were $360,000. The company does not owe money to any bank, but has $150,000 cash banked. Mr. Liggett proceeded to refer to the company's exclusive agency plan, and speaking of the future, said :

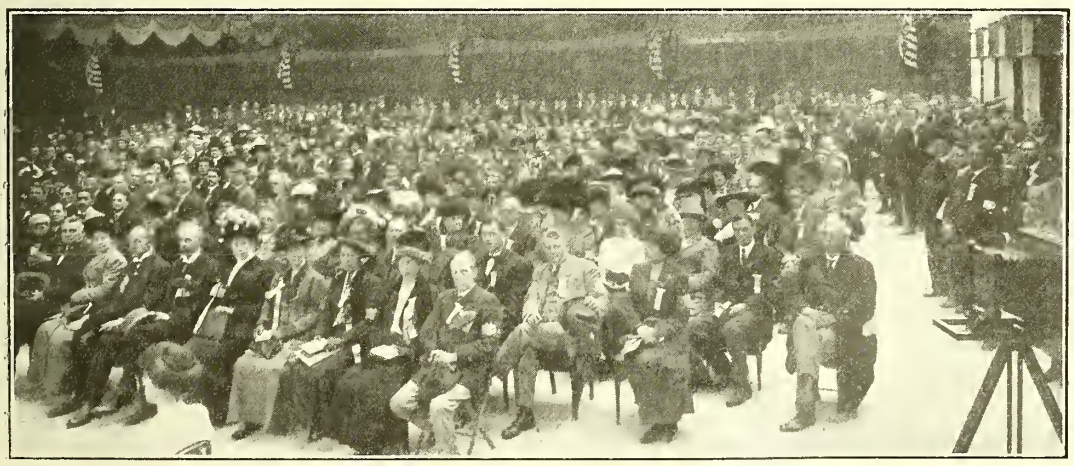
"We are soon to open in the city of Boston a Rexall store at the corner of Washington and Avon Streets, which we intend to make the finest retail drug-store in the United States. It will give us what we do not now have—adequate representation in this city. During the past year we have reduced the operating expenses of the retail stores 2 per cent. We are operating four stores in Baltimore, two in Columbus, two in Detroit, two in Toronto, five in Buffalo, two in Syracuse, and seventeen in New England. We have leased the store at the corner of Thirty-fourth Street and Broadway in New York, on the finest retail-trade corner in the world. I will not except Paris or London. It is on the first floor of the greatest hotel in the world, with 1,940 sleeping-rooms. The rental is $110,000 a year. If we should lose $50,000 a year on that enterprise, it would, in my opinion, be a good advertisement for the company. But I do not think we shall lose anything. I look for the greatest increase in business in New York State, when that new store is opened, that the State has ever seen. Our retail policy will continue as at present. No store will be bought unless it has first been voluntarily offered to the company. No stockholder will be forced out of his store or business.

"In my trip to Europe this year I spoke with the head of one of the largest drug-houses in the world. He told me that the cost of selling goods in his company averaged 20 per cent. I understand that in most houses in this country the selling cost is 25 per cent. The cost of selling last year in the United Drug Co. was only 4 per cent. . . . I recommend the establishment at once of a jobbing-house in Boston, with a chain of jobbing-houses stretching across the country. I recommend that the company acquire a paper-mill in western Massachusetts. I recommend that the company build a rubber-factory in the middle west. I recommend that an English subsidiary company be organised along lines to be approved by your executive committee. I recommend that the directors issue $750,000 of preferred stock at par to stockholders of the company to finance the new undertakings, the estimated cost of which is $1,250,000, and that the balance be taken from current income."

The Financial Statement for 1911.

was next submitted as follows :

	$		$
Cash	102,469.11	Accounts payable ...	89,630.97
Accounts receivable ...	593,005.79	Notes payable	355,000.00
Notes receivable ...	92,414.81		
Stock instalments receivable	5,650.00		
Merchandise inventories	637,484.65		
Stocks and bonds ...	224,722.92		
	$1,655,747.28		$ 444,630.97
Plant and real estate ...	400,038.88	Mortgage	50,000.00
Furniture, utensils and machinery	196,877.36	Capital stock	1,285,000.00
Advances...	35,842.46	Surplus	776,229.62
Suspense...	8,355.94	Reserve	55,147.07
Formula and trade-mark	314,145.74		
	$2,611,007.66		$2,611,007.66



Opening of the Convention in the Arena.

After luncheon at noon on Tuesday the Convention met again to hear reports from officers of the company and subsidiary companies.

Wednesday morning was devoted to the affairs of the Drug Merchants of America, the buying clubs of the stockholders. It was a symposium on "successful merchandising methods," and among the speakers were Mr. Stephen Hexter (Chicago), Mr. F. L. Tompkins (Providence), Mr. E. A. Geisler (Detroit), and Mr. A. E. Hammond (Buffalo). Better and stronger advertising, the most attractive fixtures possible, and the latest improvements in drug-store equipment were urged as essentials to success.

Thursday morning was devoted to the interests of the State Rexall clubs, Mr. Charles E. Baker, of Battle Creek, Mich., being elected President, and he called in turn upon the various clubs to tell what had been accomplished in the way of organisation, membership, and achievement.

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Entertainments.

Many ladies were present at the Convention, and the entertainments provided for them were of a varied and sumptuous character. They had automobile trips, "teas," and all that sort of thing. One evening the whole of a theatre was taken for members and their lady friends. The climax came on Thursday evening, October 5, when 2,500 sat down to dinner in the Arena, Mr. Louis K. Liggett presiding. Judge Moore, of New York, was toastmaster, and speeches were made by the Rev. O. P. Gifford, of Brookline, Professor A. A. Berle, jun., of Harvard, Mr. R. A. Robinson (he was spoken of as the Hon. R. A. Robinson), and the Hon. Herbert Parker, former Attorney-General of Massachusetts. At the end of the proceedings the lights were lowered, and the whole company sang "My Country, 'tis of Thee" and "God Save the King."

British Guests Give a Dinner.

At the Hotel Somerset, Boston, on Saturday evening, October 7, a dinner was given to the officers and heads of the United Drug Co. by the members of the British delegation to the Convention—viz., Sir Thomas Robinson, Mr. R. A. Robinson, Mr. Edwin Thompson (described locally as "proprietor of a chain of stores in Lancashire and Yorkshire, Eng."), Mr. Carpenter, and Mr. J. W. Sutherland. The company numbered thirty-two. Mr. Louis K. Liggett and Mr. W. M. Pederman, of Kansas City, Mo., spoke for the United Drug Co., and Mayor Fitzgerald for the City of Boston. All of the hosts expressed their great astonishment at the marvellous spirit of co-operation that was shown during the Convention, and they all said that nothing like it was known on the other side of the water. Plans for the new English branch of the United Drug Co. were informally discussed. During the dinner it was announced that the British delegation, before returning to England, would make a 10-days' automobile tour of American cities, including Buffalo, Detroit, and Chicago, inspecting American methods of doing business in drug-stores.

The Automobile Trip.

The five "British Delegates" were accompanied on the automobile trip by Mr. Liggett, the President, and Mr. William Wandell, who until recently had charge of the travelling staff of Carter's little liver pills in the United Kingdom, a position which he gave up in order to supervise the British Campaign of the United Drug Co., which is inaugurated with the visit of the five British pharmacists. In the course of the trip the party visited the large cities where the United Drug Co. has stores. At Detroit, on October 12, they also inspected Messrs. Parke, Davis & Co.'s establishment. The party were due to leave New York on Wednesday of this week.

Morphine Fatality.—A morphine fatality of an unusual nature occurred last Tuesday in Paris. The victim is Mr. Raymond Knight Ridgway, a young man twenty-eight years of age, and son of the distinguished American artist. Mr. Ridgway was a victim to asthma and called at a pharmacy in the Rue Lafayette to have a bottle of soothing-medicine made up, which was dispensed from a formula copied in the prescription book on a previous occasion. The formula was as follows :

Bromide of potassium	8 grams
Bromide of sodium	8 grams
Bromide of strontium	8 grams
Syrup of morphine	80 grams
Syrup of chloral	80 grams
Orange-flower water	80 grams

It appears that Mr. Knight Ridgway drank off about one-third of the preparation in question when going to bed, instead of a tablespoonful as prescribed by the doctor. The next morning Mr. Ridgway was in a state of coma, and, although a doctor was called in and gave an energetic treatment, the patient passed away without having rallied. The body was taken to the Morgue for a *post-mortem* examination. It does not appear that the pharmacist is at fault, except that he did not actually dispense from the original prescription itself; but it seems that Mr. Ridgway had a similar experience last year, when he remained in a state of coma for three days.

POISONING FATALITIES.

Eight deaths, half of which were due to misadventure, have been chronicled since our last issue.

Ammonia taken during a fit of insanity was responsible for the suicidal death of Mary McDonald (60) at Bolton.

Carbolic Acid.—Mary Ellen Banks (29), of Liverpool, poisoned herself with carbolic acid in the same room as her husband lay dead.—Annie Martin (18), barmaid, Ashton-under-Lyne, also died through swallowing carbolic acid. At the inquest Mr. John Fletcher Miller, chemist, 267 Stamford Street, Ashton-under-Lyne, deposed that the girl handed him a bottle with a request for threepennyworth of carbolic acid. Witness told her he could not supply it except in bottles ready made up at 4½*d.* She bought one of the bottles. In reply to his question, deceased said she wanted the carbolic acid to do some "whitewashing." Witness added that carbolic acid came under Part 2 of the Poison Schedule, but he really exceeded legal requirements in asking the girl what it was wanted for.—At Leeds, Tom Wilks (36), collier, of no fixed abode, poisoned himself in the street with the same lethal agent. Deceased had recently been discharged from Menston Asylum as cured. Mr. J. R. Kirk, Ph.C., Hunslet Road, Leeds, said at the inquest that he sold a pennyworth of carbolic acid to deceased, warning him of its nature. There was nothing peculiar in his manner. The sale was clearly within the rules and regulations. "Suicide during temporary insanity" was the verdict returned.

Hydrochloric Acid was contained in a bottle which Robert Armer (45), labourer, Blackpool, took for whisky. He drank some of the contents mixed with water, with fatal results.

Lead-poisoning.—The death of Winifred Miles, the wife of a Portsmouth naval stoker, was due to peritonitis set up by lead-pills taken as an abortefacient.

Veronal.—An overdose of this drug in tablet-form caused the death by misadventure of Jesse Kate Symondsen, of East Chiltington.—At the inquest on Colonel Alfred Law Sinclair, D.S.O. (58), who also took veronal for insomnia, the jury found that death was due to syncope, but whether it was accelerated by taking veronal there was no evidence to show.

NEW BOOKS.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

Alderson, W. E. *Dental Anæsthetics: A Text-book for Students and Practitioners.* 6¾×4. Pp. 103. 3*s.* net. (Simpkin.)

Allen's *Commercial Organic Analysis.* Vol. V. 4th edit. 9½×6. Pp. 614. 21*s.* net. (Churchill.) [Tannins, Leather, Dyes, and Colouring-matters (Classes 1 to 5), by W. P. Dreaper; Diphenylmethane and Triphenylmethane Colouring-matters, etc., by J. T. Hewitt; Colouring-matters of Natural Origin, by W. M. Gardner; Analysis of Colouring-matters, by W. P. Dreaper and E. Feilmann; Inks, Carbon Papers, Typewriter Ribbons, etc., by P. H. Walker; Colouring-matters in Food, by A. F. Seeker.]

Czapeck, F. *Chemical Phenomena in Life.* 7×4¼. Pp. 162. 2*s.* 6*d.* net. (Harper.)

Donington, G. C. *A Class-book of Chemistry.* Part I. 7½×4¾. Pp. 146. 1*s.* 6*d.* Parts II. and III. Pp. 276. 2*s.* 6*d.* (Macmillan.)

Hewlett, R. T. *Manual of Bacteriology: Clinical and Applied.* 4th edit. 8¼×5¼. Pp. 716. 10*s.* 6*d.* net. (Churchill.)

Jude, R. H., and Satterly, J. *Senior Magnetism and Electricity.* 7×4¾. Pp. 456. 5*s.* (Clive.)

McIntosh, John Geddes. *The Manufacture of Varnishes and Kindred Industries.* 2nd edit. Vol. III. 8¾×5½. Pp. 492. 12*s.* 6*d.* net. (Scott, Greenwood.)

Neave, G. B., and Heilbron, I. M. *Identification of Organic Compounds.* 7½×5. Pp. 112. 4*s.* net. (Constable.)

Spencer, J. F. *Experimental Course of Physical Chemistry. Part I., Statical Experiments.* 7½×4¾. Pp. 242. 3*s.* 6*d.* (Bell.)

University Tutorial Series. *Matriculation Directory.* No. 59, September 1911. Pp. 144. 7×5. (University Correspondence College, 32 Red Lion Square, Holborn, W.C.)

Watkins, A. *Photography, its Principles and Applications.* 8½×5½. Pp. 350. 6*s.* net. (Constable.)

Wood, R. *Physical Optics.* New edit. 8vo. 22*s.* net. (Macmillan.)

LEGAL REPORTS.

TRADE LAW.

Carriage of Chemical Materials.—On Monday, October 26, the Railway Commission Court continued the consideration of the application made by Messrs. Chance & Hunt, Ltd., chemical-manufacturers, of Oldbury and Wednesbury, against the Great Western, London and North Western, Midland, and North Staffordshire Railway Companies in respect to alleged undue preferences shown to their competitors. After hearing counsel the Court reserved judgment.

Order Given by an Assistant.—In the City of London Court on October 20, before Judge Lumley Smith, K.C., John Morgan Davis & Sons, wholesale druggists, 278 Bishopsgate, E.C., sued Dr. Kennard, 139 Hanbury Street, for 2*l.* 16*s.* 11*d.*, balance of account for drugs supplied to him for use in his practice. It appeared from the evidence that the goods had been ordered by Dr. Topham, an assistant to defendant, who did the dispensing, but Dr. Kennard disputed his liability. Judge Lumley Smith said he must give judgment for the plaintiffs, with costs. Defendant said he was meeting his creditors, and wanted to pay everyone equally. He could not pay at once. He had had financial difficulties. Plaintiffs' account was very questionable, with all respect to the Court. An order for the payment of 5*s.* per month was made.

High Court Cases.

Unless when otherwise stated these cases have been heard in the High Court of Justice, London.

KHOOSH BITTERS.

In the Chancery Division on Friday, October 20, Mr. Justice Parker had the motion before him in the action of W. H. Chaplin & Co. *v.* Farrow's Bank, by which the plaintiffs sought to restrain an alleged wrongful sale of bitters known as Khoosh bitters. Mr. Mark Romer, K.C., appeared on behalf of the plaintiffs and Mr. J. Hunter Gray for the defendants. The latter asked for an adjournment to enable him to consider certain evidence that had been filed in support of the motion, and suggested that the motion should be deferred for a fortnight.—Mr. Romer stated that he had no objection to this so long as the defendants would consent to give an undertaking in the meantime. They were selling (added counsel) something as Khoosh bitters which were not the plaintiffs' bitters.—Mr. Gray said this was the very thing they wanted to test. They wanted time in order to analyse the bitters.—Mr. Romer said he could not understand why they wanted to analyse the bitters.—The motion was thereupon adjourned by consent till Friday, November 3.

THE SOAP LITIGATION.

In the Chancery Division on Tuesday, October 24, Mr. Justice Joyce resumed the hearing of the actions brought by Lever Bros., Ltd., and Benjamin Brooke & Co., Ltd., against the Masbro' Equitable Pioneers' Society, Ltd., to restrain the alleged substitution of soaps manufactured by the Co-operative Wholesale Society, and called "C.W.S." and "Parrot Brand," for plaintiffs' "Lux" and "Monkey Brand." Evidence was given by Mr. Fred Redfern, formerly a clerk in the defendant society's employ, after whom Sir W. H. Lever, Bart., chairman of Lever Bros., Ltd., stated that in 1910 his employés were engaged in a house-to-house canvass, and their reports from Masbro' district were so unsatisfactory that tests were instituted, which resulted in these proceedings being taken. Cross-examined by Mr. Hughes, K.C., witness said that since 1906 the co-operative societies had taken very little of his soaps. Since 1906 the defendants had advertised that they were not going to stock his goods any longer, but he denied that would prevent people asking for them. The hearing was continued on Wednesday. Evidence for the plaintiffs being closed, Mr. Hughes, K.C., for the defendant society at once put his witnesses in the box. Mr. William Montgomery, President of the Masbro' Society and Chairman of the Grocery Committee from November 1903 until he was appointed President in September 1910, was the first witness. He stated that before 1906, when the Soap Combine was formed, the co-operative societies had discussed the question of selling their own soap, the object being to take as much as possible of the goods manufactured by the Co-operative Wholesale Society, as they shared in the profits. As chairman of the meeting frequently referred to in this case, he made the statement that in future no private maker's soap would be stocked, and he asked the members present to spread the information among the other members. Particular instructions were also given to the managers in the shops to the effect that when customers asked for a private maker's soaps they were to be told that they were not stocked. They were told to push "C.W.S." soaps. It had never come to his knowledge until this action was started that those instructions had been disobeyed. Speaking as President and as a member of the committee for upwards of twelve years, witness declared that there had been no attempt to substitute "C.W.S." soaps for those of the plaintiffs, and that the defendants throughout had acted in a perfectly honest manner. No complaint of any substitution or attempted substitution had ever reached him. Witness was cross-examined by Mr. Astbury, and stated that he was not aware that the Co-operative Wholesale Society began to manufacture an article immediately a similar article had acquired a reputation on the market, but it was a fact that they had a similar soap to "Lux" and other proprietary goods. When the assistants were warned by circular to be very careful, as Lever's agents were in the district, it did not mean that they were to do one thing then and something else when the agents left. Nothing of the kind was in his mind.

Evidence was also given by Mr. Ainsworth, Secretary to the defendant society; by Mr. Taylor, for thirty-eight years manager of the Norfolk Street branch of the defendant society, and others. The case was still going on when we went to press on Thursday.

Medicine-stamp Acts.

UNSTAMPED AMERICAN PROPRIETARIES.

At Bow Street Police Court, before Mr. Curtis Bennett, on Thursday afternoon, October 26, action was taken at the instance of the Commissioners of Inland Revenue against Mr. Charles Brooks, of Northumberland Avenue, London, W.C., and elsewhere, for selling certain unstamped medicines—namely, "New Skin," "Kondon's Pilease," "Palmer's Skin Success," "Johnson's Digestive Tablets," "Dr. Chase's Pile Ointment," "Allen's Foot-ease," "Mothersill's Sea-sick Remedy," "Togo's Japanese Corn Silk," "Smith Brothers' Cough-drops," "Papayans Bell," "Entona," and "Pape's Diuretic." There are altogether twenty-three summonses, and Mr. Cyril H. Kirby, of Messrs. Neve, Beck & Kirby, solicitors, appeared for the defence. Mr. Beattie, of the Solicitors' Department of the Board of Customs and Excise, appeared for the prosecution.

Evidence of purchase of twenty-six articles in respect to which the summonses were issued was given by two Excise officers.

Mr. Coape, Inspector to the Board, in reply to Mr. Kirby, stated that he had had a conversation with defendant. It was not the case, he stated, that defendant informed him that the articles in question were bought by him for export. As a matter of fact they were all imported from America, and it was possible some of them might be re-exported.

Mr. Kirby complained that the order of the summonses in Court was not in accordance with that in which they had reached him.

Mr. Curtis Bennett suggested that, as there was some doubt as to the date of the purchase relating to Pape's Diuretic, it should be withdrawn. This was agreed to.

The case for the defence was that in the majority of instances there was a disclosure to the effect that the articles were made in accordance with the American National Formulary, and that where this was not the case the article sold was a pure drug and in no respect a proprietary.

Mr. Curtis Bennett pointed out that only in one case, that of Papayans Bell, was the disclosure made on the outside wrapper. In giving judgment, he said there could be no doubt that with this exception and that in respect to which the summons was withdrawn in accordance with

his own request each one of the medicines was liable to stamp duty. He imposed a fine of 20*s.* in each of the twenty-four summonses, with five guineas costs in the first and 2*s.* costs in each of the others—in all 31*l.* 11*s.*

Defendant stated that that amount would be paid within twenty-four hours.

LIMITED COMPANIES.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

E. T. Pearson & Co., Ltd. (P.C.).—Capital 15,000*l.* Objects: To carry on (*inter alia*) the business of chemists, druggists, drysalters, etc., and to adopt an agreement with E. T. Pearson. The first directors are E. T. Pearson and T. H. Wilkins.

Wrigleys, Ltd.—Capital 2,000*l.* Objects: To enter into any contracts with William Wrigley Junior Co., of Chicago, U.S.A., for the supply to the company of spearmint pepsin gum. The first directors are W. Wrigley, A. G. Cox, J. H. Patrick, and J. E. Jewell. R.O., 164 Piccadilly, W.

Standard Chemical, Iron, and Lumber Co. of Canada, Ltd.—Particulars filed October 12, 1911. Capital stock, $6,000,000, in $100 shares. Registered in Ontario on January 19, 1911. Head office, Toronto. A. L. Biggs, of 66 Cannon Street, E.C., is authorised to accept service.

Indian A. L. Portable Acetylene Co., Ltd. (P.C.).—Capital 500*l.* Objects: To carry on the business indicated by the title, and to adopt an agreement with the Allen-Liversidge Portable Acetylene Co., Ltd. The first directors are T. G. Allen, P. B. Liversidge, F. R. Wettern, P. F. Heybourn, and G. W. Carr. R.O., 106 Victoria Street, S.W.

Nitrogen Exploitations, Ltd. (P.C.).—Capital 5,000*l.* Objects: To produce and accumulate nitrogen, carbonic-acid gas and other gases, etc., and to adopt an agreement between the Nitrogen Gesellschaft m.b.H., of Berlin, and R. de Toll. The first directors are R. de Toll, S. Cole, M. Olsson, H. O. Seyd, and H. de Nottbeck. R.O., 312 Regent Street, W.

James Dyson (Manchester), Ltd. (P.C.).—Capital 15,000*l.* Objects: To take over the business of a manufacturer of and dealer in aërated and mineral waters and bottler of beer and stout formerly carried on by the late J. Dyson, and recently by W. Cundiff, at Stockport Road, Longsight, Manchester, as "James Dyson." The first directors are N. P. F. Sandiford, H. C. Sandiford, and C. F. Sandiford.

N. & R. Manufacturing Co., Ltd. (P.C.).—Capital 150*l.* Objects: To acquire the rights, trade-marks, goodwill, and stock-in-trade of "Coleman's Nerve Pills," "Coleman's Nervlettes" or "Nervlettes," "Rackham's Liver-pills," "Rackham's Cough-pills," "Rackham's Gout-pills," "Rackham's Nerve-pills" and "Rackham's Tonic-compound," and "Pentney's Nerve-mixture" and "Pentney's Teething-powder," now or lately the property of J. Chapman & Co., Ltd. The first directors are A. J. Eastmead and E. J. Trash. R.O., 77 Westwick Street, Norwich.

Company News.

Stuart & Co. Cash Chemists, Ltd.—Winding-up order made on October 16.

Borax Consolidated, Ltd.—The directors have declared an interim dividend of 1*s.* per share, less income-tax, on the deferred ordinary shares for the year ended September 30.

J. S. W. Preparations, Ltd.—The annual meeting of the shareholders in this company (the manufacturers of John Strange Winter's toilet preparations) was held at the registered offices of the company, 30 Norfolk Street, Strand, on October 20, when the directors' report and accounts, showing increased trading, were adopted and a dividend of 7½ per cent. was declared.

Select Food Supply Co., Ltd.—In the Chancery Division on Friday, October 20, Mr. Justice Swinfen Eady, on the motion of the plaintiff in the action of Hazell *v.* The Select Food Supply Co., Ltd., appointed a receiver on behalf of the debenture-holders in the company. Mr. Russell Biggs appeared for the plaintiff, and Mr. Holmes, for the company, consented to the appointment of Mr. Thos. Henry May.

International Plasmon, Ltd.—The report for the year ended June 30 states that, after charging the total advertising for the year and writing 10 per cent. depreciation off factory premises, plant, etc., the net amount at credit of profit-and-loss account, including 2,268*l.* brought forward, is 10,063*l.* The sum of 2,395*l.* has been written off patents and goodwill, while the dividend (6 per cent.) on the preference shares absorbed 1,433*l.*, and an interim dividend (4 per cent.) on the ordinary shares another 1,360*l.* It is proposed to pay a final dividend of 6 per cent. on the ordinary shares (making 10 per cent., less income-tax, for the year), leaving 2,835*l.* to be carried forward.

A. & F. Pears, Ltd.—At the annual meeting held at the Holborn Restaurant on October 26, the Chairman (Mr. Thomas J. Barratt, D.L.), in moving the adoption of the report and accounts, said that the business is now in its 122nd year. During forty-six years he had had chief control and had seen the business multiply a hundredfold, so that the name has now become universally known. The demand for their specialities still further increased during the year, and they were able to propose a 10-per-cent. dividend for the seventeenth year in succession, although they had to contend with increased cost of raw materials, while law expenses had been heavy. Other soap-makers had put prices up, but theirs was a "speciality of specialities," and it would be unwise to risk putting up the price, as it would probably restriet sales. The building of a factory in America had been under serious consideration, following upon the trouble in regard to the Customs duty resulting in two law defeats at Washington. He (the chairman) and Mr. Joseph Beecham had just come baek from America. They had yet to receive propositions, but no doubt one or other will crystallise to satisfaetory results. The prospects which manufacture in America would open up were bright indeed. The resolutions were carried unanimously, as also a proposal that a sum of 300 guineas be voted to providing the Chairman with a souvenir service of plate, this being proposed by Mr. Birks, and seconded by Sir Thomas Dewar. Mr. Joseph Beecham was re-elected to the board of directors.

Charges or Mortgages.

Under the Companies (Consolidation) Act, 1908, Section 93, the mortgages or charges therein specified are (except in Scotland) void against the liquidator and any creditor of the company unless filed with the Registrar in accordance with the conditions laid down in the Act.

Full statutory particulars of the following have been filed at Somerset House, London, W.C.

Cory Brothers (Surgical Instrument Makers), Ltd.—Particulars of 300*l.* debentures created September 29, 1911, the whole amount being now issued. Property charged: The company's undertaking and property, present and future, including uncalled capital. No trustees.

Laxigen, Ltd.—Debenture dated October 12, 1911, to secure 100*l.*, charged on the company's undertaking and property, present and future, including uncalled capital. Holder: H. F. Ball, 43 Great Saffron Hill, E.C.

Poison Sale in Ireland.—At Elphin, co. Roscommon, two grocers were on Oetober 26 fined 5*l.* each, and costs, for keeping open shop for the sale of poison without having a licence and without keeping a poison-book. The poison sold was sheep-dip, and to show the danger of the sale in grocers' shops the solieitor for the Pharmaceutical Society exhibited a paeket of cornflour of almost similar appearanee for which it would be easy for the poison to be mistaken.

N.W.D.A.—The thirty-seventh annual meeting of the National Wholesale Druggists' Association was held at the Hotel Astor, New York, during the week of October 9. Dr. W. J. Shieffelin, retiring President, in his address reviewing the work of the past year, alluded to the need for limiting the sale of habit-forming drugs. Referring to relations with foreign countries, he expressed regret that Canada had not accepted the reciprocity measure. The doctor also referred to the probable effects of the Miles *v.* Park ease and the decision in the Johnson "eancer-cure" case. Other subjects touched upon included the Wiley case, tariff revision, proposed proprietary stamp-tax, and the revision of the U.S.P. Mr. T. F. Meyer, president and general manager of the Meyer Bros.' Drug Co., St. Louis, Mo., was elected President of the N.W.D.A. for the ensuing year. Mr. Meyer is one of the most popular men in the drug-trade, and the members of the Association are to be congratulated upon their ehoice. Among the numerous reports presented was a lengthy one on the prevention of adulteration, in the course of which it stated: "Some very clever imitations of the genuine balsam Peru have appeared on the market so skillfully compounded as to enable them in a general way to stand all the U.S.P. tests. It seems neeessary in purchasing this item to secure only from concerns whose reputation is of the highest, for only by the most painstaking tests can this imposition be detected." Dr. Rodney H. True gave a very interesting and valuable address on drug-cultivation. Altogether the Convention was quite as sucoessful as its predecessors, and many discussions well illustrated the unity and harmony which prevails among the members.

BANKRUPTCY REPORT.

Re Frederick William Michael, 90 and 92 Shaftesbury Avenue, W., Chemist, trading as "F. Williams & Son."—The public examination of this debtor was held last week, before Mr. Registrar Linklater at the London Bankruptcy Court, the debtor applying to pass upon accounts showing total liabilities 1,307*l.* 16*s.* 5*d.* (unsecured, 734*l.* 10*s.* 1*d.*) and net assets valued at 455*l.* 9*s.* 5*d.*, after deducting 58*l.* 4*s.* 10*d.* for payment of the preferential claims. Replying to Mr. G. W. Chapman, Official Receiver, the debtor stated that he was born in Australia, and came to Edinburgh in 1901 or 1902 to study medicine, bringing with him 1,000*l.* He qualified as a doctor in 1907, and after acting as an assistant for a short time, and practising for a few months at Standburn, near Falkirk, he removed to London. Early in 1908, with about 30*l.* capital, he commenced and had since practised at Camberwell. In March 1910 he opened a chemist's business at 90 and 92 Shaftesbury Avenue, W., fitting up the premises at a cost of about 180*l.* He carried this on under management as "F. Williams & Co." down to the date of the receiving-order. He owned a half-interest in a private company registered in March 1910 with a nominal capital of 3,000*l.* to take over from him a patent medical instrument of his own invention, but the company had done no business and was dormant. Witness attributed his failure to expenses incurred in connection with his unsuccessful candidature in January 1910 for the London County Council as a member of the Municipal Reform Party, to heavy interest on borrowed money, to the cost of fitting up the premises for the chemist's business, to loss through the dishonesty of employés there, and to want of capital. The examination was concluded.

GAZETTE.

Partnerships Dissolved.

Bath, W., and Allard, W. E., Peckham, manufacturing chemists, under the style of the Conservine Chemical Co.

Dearden, L., and Edwards, G., Southport, artificial-teeth makers, under the style of L. Dearden & Co., and at Wigan under the style of G. Edwards & Co.

Muir, R. D., and Brewer, W. K., New Cross Road and Manor Road, Brockley, London, S.E., physicians and surgeons, under the style of Muir & Brewer.

Tayler, E. W., and Brett, P. C., Yeovil, pharmaceutical chemists, under the style of Tayler & Brett.

The Bankruptcy Acts, 1883 and 1890.

Receiving Order.

Allkins, Thomas Boulton, Albert Road, Market Street, Tamworth, chemist.

Adjudication.

Hall, Samuel, Raby Street, Llanelly, mineral-water manufacturer.

BUSINESS CHANGES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

Timothy White Co., Ltd., are opening a branch at St. Austell, Cornwall.

It is reported that the Plymouth Co-operative Society intend opening a drug department very shortly.

Mr. R. Tocher, Ph.C., Crosshill, Glasgow, has sold his business to Mr. John Fyfe, chemist and druggist, 558 Cathcart Road, Glasgow.

Mr. Ernest Thornhill, chemist and druggist, 33 Station Road, Redhill, has disposed of his business to Mr. Edwards, of Barnet.

Mr. Sydney F. Body, chemist and druggist, 170 Station Road, Westeliff-on-Sea, has opened a new branch at The Broadway, Southend-on-Sea.

Messrs. Durant, Radford & Co., Ltd., merchants, 5 and 6 Billiter Avenue, London, E.C., have removed to Billiter Buildings, Billiter Street, E.C.

Mr. A. H. A. Harrington, chemist and druggist, purchased recently the business of Mr. A. Mortimer, chemist and druggist, at The Woodland Pharmaey, Woodlands Road, Ilford.

Mr. John Adamson, formerly of 162 Windmill Street, Gravesend, has purchased the business of Wellsprings & Co., chemists, Agar Street, now 47 Bedford Street, Strand, London, W.C.

Mr. K. McLennan, chemist-optician, 78A Gilmore Place, Edinburgh, has purchased the business belonging to the late Mr. Laird, Ph.C., at 40 Queensferry Street, and has disposed of his Gilmore Place pharmacy to Mr. Matthew Harper, chemist and druggist.

BIRTHS.

Francis.—On October 22, the wife of James Bridge Francis, J.P. (of Francis & Co., chemists), Brooklyn, 24 Grosvenor Road, Wrexham, North Wales, of a daughter.

Gibson.—At 15 Tynedale Terrace, Hexham, on October 24, the wife of John Gibson, F.C.S., F.S.M.C., chemist and optician, of a son.

MARRIAGES.

Barnes—Robinson.—At the Merrion Hall, Lower Merrion Street, Dublin, on October 18, Alfred J. Barnes, L.A.H., Ph.C., the Harcourt Medical Hall, Charlemont Street, Dublin, to Maude, third daughter of Mr. John Robinson, Druminally, Portadown, County Armagh.

Hare—Munnerley.—At St. Peter's Church, Birkdale, by the Rev. E. C. Collier, M.A., on October 11, Charles Hare, pharmacist and optician, 14 Liverpool Road, Birkdale, to May, second daughter of Mr. Ernest Munnerley, West Derby, Liverpool.

Heath—Riley.—On October 11, at Holy Trinity Church, Marylebone, Robert Philip Heath (of Messrs. Weston & Co., 24 Church Road, Hove), to Lottie, daughter of Mrs. Riley, 16 York Road, Hove.

Walton—Rennolls.—At the Church of St. John the Baptist, Croydon, on October 16, by the Rev. Norman Lycett, Jack Walton, chemist and druggist, the Broadway Pharmacy, Broadstairs, to Mildred Ley Rennolls, (*née* Peters).

Wilson—Cadbury.—At Bournville Meeting House on October 26, George Edward, son of Mr. G. E. Wilson, Park Hall, Kidderminster, to Isabel, eldest daughter of Mr. George Cadbury.

Silver Wedding.

Williams—Knight.—On October 27, at Holy Trinity, Bath, J. H. Williams, pharmaceutical chemist, of Cardigan, to Ada, second daughter of Mr. J. Knight, pharmaceutical chemist, Bath.

[Reprinted from The Chemist and Druggist, November 20, 1886. Mr. Williams is now of Williams' Borough Pharmacy, Ltd., 35 Commercial Road, Bournemouth.]

DEATHS.

Bell.—At Newgate Street, Newcastle-on-Tyne, recently, Mr. Joseph Bell, chemist and druggist, aged ninety-one. Mr. Bell was apprenticed in his native town, Hexham. He started in business in Newgate Street, Newcastle, in 1854, after acting as dispenser at public institutions in the city. He retired a few years ago, leaving his son, Mr. John R. Bell, chemist and druggist, to carry on the business.

Blunt.—On October 8, Mr. Walter Arthur Blunt, chemist and druggist, Wyle Cop, Shrewsbury, aged thirty-seven.

Craig.—On September 7, suddenly, at Craighame Cairns, N. Queensland, Mr. Robert Craig, chemist, Abbott Street, Cairns, Queensland. Mr. Craig emigrated from Scotland some years ago.

Farrer.—At 348 Gloucester Road, Bristol, on October 23, Mr. Robert Samuel Farrer, chemist and druggist, aged seventy-one. Mr. Farrer was an assistant when the Pharmacy Act, 1868, was enacted, and he passed the Modified

examination in October 1870. He was for twenty-four years in business at the Waterloo Pharmacy, High Street, Stroud, and retired a few years ago. We recall many pleasant letters from him, and practical observations for publication in the *C. & D.*, especially connected with our *Diary*. A very short illness preceded his death. Mr. Farrer leaves a widow, four sons, and one daughter; one son (Mr. Bartholomew Farrer, chemist and druggist) is in Japan and another in Canada. The funeral took place on Thursday at Arno's Vale Cemetery.

Gibson.—At Manchester, on October 25, Alderman Robert Gibson, J.P., managing director of Robert Gibson & Son, Ltd., medicated-lozenge manufacturers, Carlton Works, Hulme, aged seventy-nine. Alderman Gibson's death occurred under tragic circumstances. While addressing the members of the City Council in the Council Chamber on Wednesday afternoon he suddenly collapsed, and died ten minutes later in one of the anterooms, to which he had been removed by his colleagues. The Council at once adjourned, members being informed that Alderman Gibson's death was due to heart-failure. Alderman Gibson was born at Carlton-upon Trent in 1832, and in 1845 was apprenticed to Dr. Pettinger, of Sutton-upon-Trent (afterwards of Manchester), who also had a chemist's shop at Newark, where young Gibson spent most of his time. In 1850 Mr. Gibson went to Manchester, and for two or three years was an assistant with Messrs. Mottershead & Roberts in St. Mary's Gate. In 1854 he opened a retail chemist's shop in Preston Street, and thirteen years later purchased a small building in Erskine Street, Hulme, where he commenced the manufacture of medicated lozenges. He originated chlorodyne lozenges, which became popular, and he was soon compelled to make extensions by the purchase and alteration of cottages adjoining the works. Still the business grew, and in the end Mr. Gibson erected the large building now occupied by the company, which he called Carlton Works, after his birthplace. Mr. Gibson became a pharmaceutical chemist in 1853. The firm was incorporated in 1899 with a capital of 20,000*l.* Alderman Robert Gibson was the managing director, other directors being his sons—Mr. Frederick H. Gibson, Mr. Arthur A. Gibson (in charge of the London warehouse), and Mr. Wm. H. Gibson. The business is one of the largest exclusively devoted to the manufacture of chemists' confectionery and employs over two hundred people. Alderman Robert Gibson always led an active life in the political and municipal world. After serving on the City Council since 1882 he was promoted to the aldermanic bench in 1893, and in 1897 filled the position of Lord Mayor of Manchester. Perhaps Mr. Gibson's services as Chairman of the Gas Committee have been the most appreciated, as will be understood by anyone acquainted with the importance of the subject to Manchester. He was also a Justice of the Peace for the City of Manchester. He had only recently returned to Manchester after a long holiday following a slight illness.



Alderman Gibson

Lord.—On October 3, Mr. Robert Booth Lord, chemist and druggist, 1 Shaw Road, Royton, Oldham, aged sixty-four.

Lynass.—At 62 Belgravia, Ulsterville Avenue, Belfast, on October 19, Mr. William Armstrong Lynass, Ph.C., of 5 Ann Street. Mr. Lynass had remained at his business premises until a late hour on Wednesday, and died of heart failure at 4 A.M. Mr. Lynass was educated at the Belfast Royal Academical Institution, and served his time with Grattan & Co., Ltd., Corn Market, Belfast, subsequently filling positions with Messrs. Hayes, Conyngham & Robinson, Ltd., Dublin, and Mr. T. R. Lester, Cork. He returned to Belfast to commence business on his own account. The funeral took place on October 21 in the City Cemetery, and was very largely attended.

Wright.—At 248 Green Lanes, Finsbury Park, London, N., on October 23, Mr. William Wright, aged sixty-two, managing director of Thomas Hubbuck & Sons, Ltd., 24 Lime Street, E.C.

PERSONALITIES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

Mr. J. R. Brough, C.C. (of Lewis & Burrows, Ltd.), is to visit India in connection with the Delhi Durbar.

Mr. J. Noble, chemist and druggist, Wallington, has been elected treasurer of the newly formed local Traders' Association.

Mr. Richard Reid, who has lately been with Mr. A. E. Hobbs, Tunbridge Wells, leaves next month for an appointment in Penang.

Mr. Frank Blackmore, Ph.C., High Street, Weston-super-Mare, has been installed W.M. of the King Alfred Lodge of Freemasons.

Mr. Edward Thomas, chemist and druggist, 123 Drake Street, Rochdale, has been returned to the Town Council as member for the Wardleworth South Ward.

Mr. James Bisset, who has been with Messrs. Handford & Dawson, Harrogate, is going out to Messrs. Guiner et Cie., of Cannes, as their English pharmacist.

The Nobel prize for medicine has been awarded this year to Professor Allvar Gullstrand, of the Upsala University, for his research work in connection with the dioptrics of the eye.

Mr. Harry S. O'Donnell, of the dispensary staff of the Hospital for Sick Children, Great Ormond Street, London, W.C., has obtained an appointment in the Botica Inglesa, Oruro, Bolivia, and sails next month.

Alderman Henry Dunn, chemist and druggist, Shipley, Chairman of the West Riding County Council, presided at the opening on October 21 of the training college for women students, erected at Bingley, at a cost of 80,000*l.*

Mr. F. C. Hellett, chemist and druggist, 5 Lewes Road, Brighton, who met with an accident at Lewes railway station, sustaining a severe fracture of the shoulder, has had the arm amputated and is now progressing favourably.

Mr. William Briggs and Mr. Edward Cardwell, retired chemists, have been returned unopposed to the Lancaster Town Council. Mr. Briggs represents John o' Gaunt Ward and Mr. Cardwell Queen's Ward. Mr. Cardwell is the Mayor-elect of the Borough.

Sir Scott Foster was proposed for re-election as Mayor of Portsmouth on October 24. This will be the fourth time he has filled the position. His brother, Councillor F. G. Foster, was on October 25 elected an Alderman of the Town Council.

Mr. Claude S. Watson Will, son of the late Mr. W. Watson Will, Principal of the Metropolitan College of Pharmacy, has obtained an engagement in Ipoh, Perak, F.M.S., as second in the business managed by Mr. Herbert M. Hodges, who is at present home on holiday.

Mr. John Wesley Walker, C.C., Ph.C., who has been placed on the Commission of the Peace for Berkshire, was until his retirement in 1887 in business at Maidenhead. He has served on the Maidenhead Town Council since 1903, being Mayor in 1905. He was also for several years Chairman of the local Board of Guardians.

Soap and Glycerin Production.—A well-known British soap-manufacturer, in the course of a conversation recently, said that although German chemists may be cleverer than our own, yet we could beat the German soap-maker. He had also been told by a German soap-maker that his trade had to pay a duty equivalent to 10 per cent. on all the tallow and coconut oil imported, and this prevented them from successfully meeting British competition. Again, in France the costs were so high in the production of refined glycerin that the British refiner imported crude glycerin from France, refined it and sent it back to France, and was able to pay the French duty, something like 7*l.* per ton, and then beat the French soap-maker in this branch of the business.

TRADE NOTES.

A Winter Line advertised by Messrs. T. Guest & Co., Carruthers Street, Manchester, is the "Chest and Lung Cake," which is supplied at 7*s.* per gross.

Messrs. Prichard & Constance (Wholesale), Ltd., 71 Newman Street, London, W.C., have registered "Amamireg" as their cable and telegraphic address.

"Daisy Calendars" are offered to chemists this week through our advertisement pages by Daisy, Ltd., Mammoth Works, Leeds, to whom early application for supplies should be made.

Messrs. James Boulton & Co. (1909), and not "James Boulton & Co., Ltd.," is the designation of the firm at Crayford Mills, Stratford, E., to whom reference was made in our Personalities last week.

"The Ilford Manual of Photography" is the best-known instruction book in photography, and it is interesting to note from the advertisement in this issue of Ilford, Ltd., Ilford, London, E., that a new edition has just been published, which marks the issue of 225,000 copies of the book.

Synthetic Perfumes.—Messrs. Delvendahl & Küntzel, Werder a. Havel, Berlin, are manufacturers of synthetic perfumes. In their advertisement in this number they particularise benzyl benzoate, benzyl acetate, and benzyl alcohol, which have special uses in compounding artificial scents.

Cartons.—Messrs. Robinson & Sons, Ltd., Chesterfield, figure in this issue examples of the stock lithographed cartons which they hold suitable for use with winter specialities. The name and address of the chemist are inserted in the panels left for the purpose. Specimens and prices can be obtained on application.

Pistonless Press.—This press, which is now made by Messrs. R. A. Lester & Co., Ltd., Dursley, Gloucestershire, works from the ordinary water-main with a pressure of from one to two hundred tons. Its advantages are worth inquiry by those who are installing or improving their hydraulic machinery. It is much used by wholesale druggists.

P.A.T.A. Prices.—The additions to the Protected List during October are: Bayer's additional preparations, Havanita toilet-cream, Mrs. Johnson's baby-soap, Kasolak, Losall's compound sulphur soap, Luton straw-hat dyes, Menthacone, Milady's face-powder. The removals are: Muller's salts and Charles's Zenobia perfumes.

Messrs. Edward Cook & Co., Ltd., the soap specialists, of Bow, were exceptionally fortunate with their exhibits at the Turin Exposition, having received three Grand Prix, one being for household and toilet soaps, the second for perfumes, and the third for disinfectants, the last-named being specially for "Cofectant" and preparations made from it.

Empty Odol Bottles.—The Odol Chemical Works, 59-63 Park Street, London, S.E., give one full half-a-crown bottle of Odol in exchange for every fifteen empty full-size or twenty half-size Odol bottles sent to them. The Works receive many letters which indicate that chemists have overlooked these advantages, and the firm feel sure that a timely reminder of this fact would be appreciated by Odol users.

"Omnopon" Price-list.—We have recently quoted from a number of articles which have appeared in the medical journals as to the excellent results following the use of "Omnopon" and "Omnopon-Scopolamine" in local anæsthesia. We now learn from the Hoffmann-La Roche Chemical Works, Ltd., 7 and 8 Idol Lane, London, E.C., that they issue a price-list of "Omnopon" and its preparations, in which full particulars are given of the methods of use, the manner in which they are put up, and the prices to chemists.

Sandal-oil Capsules.—In reference to the remarks in the *C. & D.* regarding the purity of the sandal oil used in making capsules, we have received a box of sandal-oil capsules from Messrs. Jules Denoual & Co., Carlton Works, Asylum Road, Peckham, London, S.E., which are sent out with a guarantee that they contain only "the finest quality East Indian sandalwood oil, answering the requirements of the British Pharmacopœia." The capsules, selling at 2*s.* 6*d.* per box, are beautifully made, well packed, and are offered at a low figure.

Kacepe Balsam.—The Anglo-Continental Chemical Works, Ltd., 63 Crutched Friars, London, E.C., prepare an ointment under the name of kacepe balsam which is put up in collapsible tubes, and contains as medicaments acetyl-salicylic menthol and ethyl esters. It is intended to supersede the unpleasant-smelling salicylic methyl ester, and is employed for similar purposes. In response to circulars sent to the medical profession the makers have sent out a large number of samples, and chemists should be prepared for the demand which will doubtless arise when these samples have been tested.

"Merck's Annual Report."—This report of recent advances in pharmaceutical chemistry and therapeutics for the year 1910 has just been issued by Mr. E. Merck, 16 Jewry Street, London, E.C. The first sixty-three pages are devoted to two articles on the cacodylates and on kephir, followed by the monographs on preparations and drugs which comprise the greater part of the book, the rest being devoted to the various indexes. The monographs epitomise in an impartial manner the advances of the twelve months under review, and the whole book forms a useful and instructive addition to the library of practising chemists. Copies are obtainable at 1*s.* 6*d.* through booksellers, but a limited number has been reserved for free distribution to pharmacists.

"Milk of Magnesia."—In connection with the unusual case in regard to emulsion of magnesia under the Sale of Food and Drugs Acts, which we reported last week, and which action, it was stated, arose from the variable strengths of preparations which had been purchased under that name, the Chas. H. Phillips Chemical Co., 14 Henrietta Street, Covent Garden, London, W.C., make an announcement in this issue which deserves attention. Their milk of magnesia contains at least 24 grains of magnesium hydroxide per oz., and this fact has always been stated on the labels of the bottles. The preparation has been in use for more than a generation, and is invariably prepared by a definite process, so that it is always the same. The emulsion of magnesia of the "British Pharmaceutical Codex" is only about half the strength of the Phillips' preparation, and the process is different, so that any variation which may result is obviously not due to the Chas. H. Phillips Chemical Co.

Pocket Diaries and Almanacs for 1912.—Messrs. James Townsend & Sons, chemists' printers, Exeter, are sending out samples of their pocket diaries and almanacs for 1912. The "Pocket Diary and Note Book" is a red-covered booklet of sixty-eight pages (3½ in. by 2¼ in.), six pages of which are for the chemists' own advertisements. The "Popular" pocket diary is larger in size, being 5¼ in. by 2½ in. This diary can be had bound in gilt-lettered cloth or with paper covers. Both diaries have one week to a page. The "Bouquet" Almanack (3½ in. by 2¼ in.) has thirty-two inside pages and an artistic cover in colours. The internal matter includes lists of specialities and requisites, hints, etc., as well as memoranda pages. The "Universal" almanac is a more pretentious pamphlet of thirty-six pages (7½ in. by 4¾ in.), including the tinted cover. It contains, besides calendars, notes on famous folk, archæological subjects, poison-antidotes, household hints, postal information, ready reckoner, etc. An extra eight-page supplement for list of proprietaries is also available.

Dr. Bow's Liniment is one of those preparations which enjoy the distinction of having been regarded as so good that a formula for something like it was put forward for inclusion in the British Pharmacopœia. A distinction of this kind is excellent evidence of the value of a preparation, but it carries with it the disadvantage to the proprietors and the public that the imitation is the same as the original—a supposition which the makers insistently repudiate. Dr. Bow was a medical practitioner in Alnwick, and early last century enjoyed remarkable success in the treatment of bronchitis, croup, and kindred complaints by the use of the special liniment with which his name became associated subsequently. The treatment

was an advance upon that in vogue then—viz., bleeding—and medical practitioners in the North, especially in Scotland, took it up, with the result that the liniment became popular. Chemists are familiar with the package in which the liniment has always been sold by the makers, but all may not be aware that the booklet of directions was written by Dr. Bow in 1840, and has been used until recently, when a new one, entitled "From Father to Son, 1830 to 1911," began to be used. The liniment is made by Dr. Bow's Liniment, Ltd., 8 Union Marine Buildings, 11 Dale Street, Liverpool, the directors of the company being two of Dr. Bow's grandsons, who possess the secret of the preparation.

Ammochlorique Inhaler.—This is a new ammonium-chloride inhaler which is placed on the market by Messrs. C. J. Hewlett & Son, Ltd., 35 to 42 Charlotte Street, London, E.C. The illustration gives an idea of the ammochlorique inhaler, but it is necessary to emphasise the simplicity of the apparatus. It is made of toughened glass, can be sterilised by boiling, and there is nothing to get out of order. The acid and ammonia are supplied in ampoules, the ammonia being placed on the moistened sponge and the acid in the internal bulb. The result is a copious evolution of ammonium-chloride vapour, which is inhaled at the mouthpiece. The complete apparatus, with ampoules of acid and ammonia, retails at 4*s.* 6*d.*



Photographic Developers.—We have this week had an opportunity of testing some of the developers manufactured by Messrs. Johnson & Sons, Ltd., 23 Cross Street, Finsbury, London, E.C. Azol is a concentrated one-solution developer which only needs the addition of water for use. For plates 20 minims of azol is diluted with 1 oz. of water, while for gaslight papers double this strength is needed with the addition of a little potassium bromide. It will thus be seen that the concentration is such that azol is a most convenient developer both for home use and when travelling. In practice, we find that azol fulfils the promises of the manufacturers, and very exact results are obtainable when correct exposures have been given by means of the temperature-chart which is sent out with each bottle of the developer. The dilution and temperature of the developer influence the time for development with different plates, and this is shown without calculation on the chart. The other preparation which has been submitted to us is "Johnson's Gaslight Developer," a tablet form ("Scaloids"), a pair of tablets being dissolved in 1 oz. of water for all gaslight papers and in 2 oz. of water for bromide papers. This developer is also included in cartridges and the 2*d.*-packet series. Another idea which we think will be appreciated is a rubber-sheathed cork which Messrs. Johnson have patented. This gives a more solid cork, less likely to slip, especially when used with viscous liquids like glycerin and concentrated developers. The rubber-sheathed corks have been proved to be effectual in use, and they are supplied in various sizes.

Martindale's List.—When a price-list is of such a nature that it compels the receiver to read it by reason of the interest it evokes the list may be said to have fulfilled an important part of its object. It is this thought that occurs to us on receiving a copy of the new edition of the complete list of William Martindale, manufacturing chemist, 10 New Cavendish Street, London, W. The list runs to nearly 200 pages, and is provided with an attractive photographic cover which is symbolical of the fact that an old-established business can supply all the newest remedies used in medicine as well as the older medicaments. Turning over the pages of the list, one notes that many alterations and additions have been made since the last edition. The several pages of suggestions for therapeutic treatment with Martindale's specialities which are given at the end of Part II. of the list are useful and interesting. Newly added articles in this part are borated hydrogen peroxide (liberates oxygen in contact with organic matter), cicatricine (a thiosinamin injection), faexin (an active yeast), formagules (formalised capsules), salvarsan outfits (various patterns), stearettes (for intestinal medication), conic solubes (for ionisaton), lotion sterules, patent trilactine tablets (dissolve in the bowels only), and medicated trilactine milk. The list of Wimpole Institute vaccines is fuller and more complete. Part III., devoted to instruments, contains new lines; while Part IV., dealing with analytical work and apparatus, is particularly useful to chemists. A good index enables the list to take its place in the pharmacy as a convenient reference-book.

Oertling Balances.—The awards at the Turin Exhibition which were taken by Mr. L. Oertling, Turnmill Street, London, E.C., were for assay balances and balances suitable for use in chemical laboratories. The assay balances shown were all constructed with agate knife-edges working on agate planes. The length of the beams varies from 20 cm. to 10 cm., and they are constructed as light as possible in order to ensure quick oscillation, a complete oscillation ranging from 7 to 20 seconds. The following were shown:

No. 9DP. (assay balance). Largely used in mints. Carries 5 grams in each pan, and is sensitive to 0.05 milligramme.

No. 12 S.B.A. with a 6-in. (15.2 cm.) beam. Used in mints and assay-offices and by mining companies in South Africa.

No. 14. Probably the most popular balance with mining chemists in South Africa; chiefly used as a reference or umpire balance. The beam is 6 in. (15.2 cm.) in length, the capacity 1 gram, and the sensitivity 0.005 milligramme.

No. 12C. Of entirely new design, having a beam only 10 cm. in length. It will carry 1 gram, and is sensitive to 0.005 milligramme. Fitted with adjustable lenses for reading the divisions on the beam and scale.

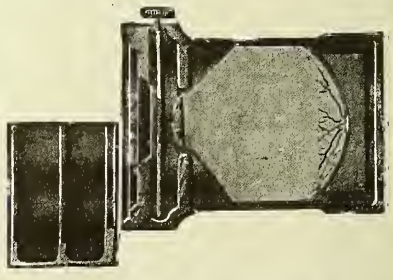
The chemical balances shown were:

No. 1A. A balance suitable for use in universities and colleges. It has a 6-in. (15.2 cm.) beam, and is fitted with agate knife-edges working on agate bearings. The capacity is 200 grams and the sensitivity 0.5 milligramme.

No. 30. Specially constructed for the laboratories of factories, steel-works, etc., where vibrations are unavoidable.

No. 5 SB. The best instrument for research work. It is used by the Standards Department, Standards Bureau, Washington, and by the National Physical Laboratory, Teddington. It carries 250 grams and is sensitive to 0.1 milligramme. It can be fitted with a prism and reflector, by means of which the reading is taken from a distance either by telescope or reflected light. The pointer is 20 cm. in length, and in order to obtain a reading to 0.01 milligramme the telescope should be placed at a distance of five times the length of the pointer from the balance.

"Hu-model" Practice Eye.—Recent events in the optical world have broken down the reserve which opticians observed on the question of eye-diseases. It being now the opinion of oculists that an optician should be able to recognise a diseased eye, it becomes a matter of importance to be able to recognise the clinical signs of the affections of the eye likely to be met with in practice. Some chemist-opticians have been able to attend eye clinics, but to the busy man this it not always possible, owing to distance or the time at which the demonstrations are held. In these circumstances the use of practice eyes is to be recommended, and a visit this week to Messrs. Raphael's, Ltd., manufacturing opticians, 57 Hatton Garden, London, E.C., has revealed to us that the wholesalers have anticipated this demand. The "Hu-model"



practice eye which we particularly noted is the most complete of these. It is a neat little apparatus, reproducing the exact conditions of the human eye, and permits the exact study of the sizes and forms of retinal image, ophthalmometry, ophthalmoscopy, and retinoscopy. The illustration given here is a section of the instrument which shows the glass globes employed to give myopic, hyperopic, emmetropic, and astigmatic refractive conditions. The model retina is placed at the back of the globe. The latest improvement to this practice eye is the addition of a series of retinas reproducing diseased conditions. These have been taken from "Haab's Atlas and Epitome of Ophthalmoscopy," and are as follows :

(1) Incipient glaucomatous excavation of optic-nerve (present in temporal half).
(2) The same more advanced.
(3) Atrophy of the optic nerve, due to increased intra-ocular tension (glaucoma).
(4) Retinal detachment in the temporal portion of the eye-ground.
(5) Retinal detachment at the inner, upper, and lower portions.
(6) Recent disseminated inflammation of the choroid, of the overlying retina, and of the optic-nerve.
(7) Disseminated choroiditis.
(8) Sarcoma of the choroid.
(9) Inflammation of the optic-nerve, and the adjacent portion of the retina in syphilis.
(10) Intense inflammation of the optic-nerve (papilitis).
(11) Atrophy of the optic-nerve after inflammation (neuritic atrophy).
(12) Atrophy of the optic-nerve after interruption of the conducting-power of its fibres.

The complete apparatus costs 2*l.* 6*s*. It may here be mentioned that Messrs. Raphael's have produced two new lists which should be inquired about, the one is an "abridged catalogue of ophthalmic and test-room requisites," which contains a selection of goods useful to chemist-opticians, and the other is a "list of students' ophthalmic and refractive requisites," which appeals particularly to students. Among the special features of the latter list is a good optical bench, which is almost indispensable now that greater attention is paid to practical work in the optical examinations.

WESTMINSTER WISDOM.

The Week in Parliament.

Cabinet Changes.

The reconstruction of the Cabinet, the publication of which was made coterminous with the reassembling of Parliament, involves one or two surprises which cannot be said to have been altogether foreseen. In the first place, it is not without interest at the present moment that Mr. Reginald McKenna, the new Secretary of State for the Home Department, will be the third holder of that office who has been actively associated with the fortunes of the Shops Bill, which will again be before Parliament in the course of the resumed Session, Viscount Gladstone and Mr. Winston Churchill, now First Lord of the Admiralty, being his predecessors. Another appointment of interest is that of Mr. Hobhouse to Cabinet rank. The right hon. gentleman, as is well known, has long been marked out for preferment. He has vacated the post of Financial Secretary to the Treasury for that of Chancellor of the Duchy of Lancaster, with a seat in the Cabinet. Mr. Hobhouse, whose promotion will create a by-election in East Bristol, has been one of the most prominent figures at question-time in the House of Commons for several Sessions past, where he has devilled for the Chancellor of the Exchequer. He is familiar with the alcohol question as it affects wholesale druggists and chemical-manufacturers. His successor as Financial Secretary to the Treasury, the Right Hon. T. McKinnon Wood, is not unfamiliar with it from personal experience, and we understand that he is taking a grip of the subject.

Shops Bill.

Mr. Ian Malcolm, M.P., will on Monday ask the new Home Secretary (Mr. McKenna) when the Shops Bill will be proceeded with, and if a week's notice can be given before the report stage is taken.

National Insurance Bill.

The Government scheme for closuring the Insurance Bill, which was announced by the Chief Ministerial Whip on Tuesday evening, October 24, is of a drastic character. Fifteen days are allotted to the Committee stage, four to report, and one to the third reading. It is expected that the Bill will be sent to the Upper House in the first week in December. It is not anticipated, even in the most sanguine quarters, that the Session can be brought to a termination before Christmas week.

On Thursday, in the House of Commons, Mr. Worthington Evans, M.P., put the following question to the Chancellor of the Exchequer :

Whether a certified assistant to an apothecary under the Apothecaries Act, 1815, now acting as one of the dispensers at the Metropolitan Hospital, Kingsland Road, will be qualified under Section 14 (5) (3) of the National Insurance Bill as now amended: and, if not, whether, in view of the undertaking given by him, such further amendment will be proposed by the Government as may be necessary to prevent his exclusion.

Mr. McKinnon Wood in reply said : Such a person if he has been acting for not less than three years can be employed by a pharmacist in dispensing under the Bill. My right hon. friend is prepared to consider whether any amendment is necessary on report.

Mr. Worthington Evans : Will the right hon. gentleman take into account the fact that there are 500 of these dispensers, and that this affects a large class ?

No answer was given.

On Monday next, in the House of Commons, Mr. Kellaway will ask the Chancellor of the Exchequer whether he is aware that the Pharmaceutical Society of Great Britain does not recognise the pharmaceutical certificates of any British Colony, and if, under the National Insurance Bill, the holders of British-Colonial pharmaceutical certificates who are in business as chemists in this country will be prohibited from supplying drugs and medicines under the Bill. In conversation with our Parliamentary representative, Mr. Kellaway said they wanted to ensure that the men who were called upon to dispense medicines under the Insurance Bill should be properly qualified, but the fact that there was a want of sympathy between the Pharmaceutical Society at home and the Colonies ought not to prevent a properly qualified man obtaining a living under the Bill. Cases had been brought to his personal notice in which people were qualified but whose certificates the Society would not recognise. After all, he supposed the question resolved itself into one of reciprocity. These men said that most of their practice in future would be under the Bill. They possessed an industrial business, and if they were not allowed to go on the panel of those who were to supply the medicines they might as well shut up shop altogether. He knew a case in the country where a man purchased a chemist's business, but he was now afraid that under the terms of the Bill only those whose certificates were recognised by the Pharmaceutical Society would be allowed on the panel. He hoped that when the reply to his question was given by the Chancellor of the Exchequer this very important point would be cleared up.

[The honourable gentleman is apparently misinformed on some points, but the publicity given to his opinions will ensure that he is put on the right track.—Ed. *C. & D.*]

There is little or no likelihood, in view of the stringency of the Government proposals for the closure of the Insurance Bill, that an opportunity will be found for moving the new clause by Mr. W. S. Glyn-Jones, M.P., relating to the setting up of local Pharmaceutical Committees. This clause is as follows :

(1) A local pharmaceutical committee shall be formed in the area of each county and county borough consisting of persons engaged in the dispensing of medicines and the supply of appliances to insured persons in such county or county borough.
(2) The number of members of each pharmaceutical committee, the mode of election and the period of service of such members of such committee shall be determined by the Insurance Commissioners.

(3) The local pharmaceutical committee shall act as an advisory committee to the local Health Committee on all matters affecting the arrangements with persons, firms, or corporate bodies to dispense medicines and to supply the necessary appliances for the medical treatment of insured persons, and shall discharge such other duties and exercise such powers as shall be determined by the Insurance Commissioners.

Should no opportunity present itself, it is confidently hoped that the Government may be able to see their way to embody, on their own account, the suggestions of the hon. member.

The Late Dr. Hillier, M.P.

The suicide of Dr. Hillier, M.P., on Tuesday, created a painful sensation in the lobbies on the opening night of the resumed Session. The hon. member, who had taken a prominent part in the negotiations over the National Insurance Bill, was one of the few members of the medical profession in the present House of Commons. Among the others are Dr. Addison, who has been one of the most active participators in the negotiations between the medical profession and the Treasury, Dr. Chapple, Dr. Esmonde, Sir Robert Price, and Sir R. Finlay. Amendments to Clause 43 of the National Insurance Bill are still standing on the order paper in the name of the deceased member, who proposed also at the end of Clause 50 to insert :

"In the case of a dispute between an approved society and the local Health Committee as to the sum to be paid to the committee by the society in respect of any member of the society entitled to medical, maternity, or sanatorium benefit, the question shall be decided in the prescribed manner by the Insurance Commissioners."

The Colouring of Milk.

The suggestion is to be made to the President of the Local Government Board in the House of Commons, on Monday, that in the Milk and Dairy Bill which he is about to introduce the colouring of milk should be made a penal offence.

The Parcels Post.

Mr. Samuel Roberts, M.P., is directing the attention of the Postmaster-General, on Tuesday next, to the number of parcels sent through the parcels post which arrive in a broken and disordered condition. The hon. member proposes to ask that inquiry may be made and more care taken in future.

Sale of Rectified Spirits by Wholesale Druggists.

We understand that Mr. W. S. Glyn-Jones, M.P., is making strenuous efforts to secure the incorporation in the Finance Bill, which will shortly again be before Parliament, of the clause relating to the sale of rectified spirits by wholesale druggists, which, but for an accident, would have come up for consideration when the Revenue Bill was before the House of Commons. The proposed clause was printed in the *C. & D.*, July 29, index folio 154.

Poisons and Pharmacy Bill (Ireland).

Captain Craig, M.P., informs our Parliamentary representative that it is his intention to reintroduce at an early date next Session the Bill which he brought forward just prior to the adjournment for the summer recess. The object of the hon. member in so doing, when there was no probability whatever of any progress being made with the Bill this year, was in order that it might be printed and circulated among those interested in its proposals and discussed by the various pharmaceutical bodies in the course of the autumn. Captain Craig will probably ballot for a place next Session, but failing any luck in that direction will, as heretofore, take his chances in the ordinary way.

Chemists and the Shops Bill.

We learn officially that the Home Secretary has received, and continues to receive, a large number of applications from various parties interested in the Shops Bill—the report stage of which will, it is hoped, engage the attention of the House of Commons at an early date—for permission to expound their views in greater detail than has hitherto been done in certain cases. One of these applications is, it is stated, from the Chemists' Assistants' Reform Union. The Home Secretary and the Parliamentary Under-Secretary (Mr. C. F. G. Masterman, M.P.) have already received close upon one hundred deputations on the subject of the Bill, and it is stated that there is very little likelihood of any more interviews being granted on the subject in view of the advanced period of the Session and the fact that the further progress of the Bill, if it is to be placed upon the Statute-book before the prorogation in December, must be attended by as little delay as possible, and this would probably be the case if the Home Secretary were to commence afresh with the audiences which have very generously been granted to those interested in the Bill.

WILL PROVEN.

Mr. Robert Cundall, Pocklington, chemist and druggist, who died on August 7, left estate of the gross value of 6,459*l.* 19*s.* 10*d.*, of which the net personalty has been sworn at 5,582*l.* 19*s.* 4*d.* Probate has been granted to his son, Mr. Thomas Bowser Cundall, chemist, Pocklington, and his daughter, Miss Mary Blanche Cundall. Subject to a number of specific bequests, he left his household effects equally between his three children, Thomas Bowser Cundall, Mary Blanche Cundall, and Edward Cundall, and his house and shop in Market Street, Pocklington, and all his other real estate in Pocklington to his son Thomas Bowser Cundall, charged with the payment of a life annuity of 20*l.* to his daughter, Mary Blanche Cundall. He left the goodwill, plant, stock-in-trade, patents, prescriptions, recipes, trade-marks, and book debts, etc., of his business to his son Thos. Bowser Cundall, charged with the payment of his business liabilities, and the residue of his property as to five-twelfths to his son Thomas Bowser Cundall, three-twelfths each to his son Edward Cundall and his daughter Mary Blanche Cundall, and one-twelfth to his son Robert Staveley Cundall.

CHEMICAL SOCIETY.

THE first meeting of the session was held at Burlington House on Thursday, October 19, Professor P. F. Frankland, F.R.S. (President), in the chair. It was mentioned that during the vacation the Society had lost by death three of its honorary and foreign members—Professor Ladenburg, of Breslau, Professor W. Spring, of Liège, and Professor Troost, of Paris. The President announced that Professor H. B. Dixon will deliver the Berthelot Memorial Lecture on November 23. There was a long list of communications, but only five were read, and they were of little pharmaceutical interest. Professor Green and Mr. E. A. Bearder described some

Alkaline Condensations of Nitrohydrazo Compounds

which have resulted in the production of a series of substances analogous to those formed as intermediate products in the preparation of the stilbene series of dyes. A striking experiment shown was the action of alkalis on *p-p*-dinitrohydrazine, by which this pale-yellow substance is converted into a deep indigo-coloured product.

Mr. Clayton gave an interesting account of his researches on some early varieties of

Matches,

from which it appeared that the first matches, which were struck by being drawn through a double layer of sand-paper, were made by a Mr. Jones about 1828, and were tipped with a mixture of antimony sulphide and potassium chlorate. Mr. Clayton's paper was illustrated by an interesting set of early forms of match, including some in which ignition was brought about by breaking minute tubes of sulphuric acid into mixtures of organic matter and potassium chlorate. Dr. Mackenzie and Mr. Barrow then described further cases of

Optical Inversion

brought about by the action of thionyl chloride or phosphosus pentachloride on malic, mandelic, and tartaric acids and their esters. The other papers read were by Mr. A. E. Dunstan on a simplification of the method of preparing *syn*-aldoximes and by Drs. Morgan and Clay on the absorption spectra and constitution of nitration products of *p*-nitrotoluidine.

PHARMACEUTICAL SOCIETY.

NORTH BRITISH BRANCH.

A MEETING of the Executive was held at 36 York Place, Edinburgh, on Friday, October 20, Mr. J. P. Gilmour (Chairman) presiding.

Obituary.

The Chairman at the outset referred to the death of Mr. Charles Kerr, Dundee, speaking in appreciation of his personal worth and services to the Society, and moved that a record to this effect be placed on the minutes. The Vice-Chairman (Mr. Giles, Aberdeen) seconded the motion, which was adopted after a letter from Mr. Wm. Doig, Dundee, in regard to the same subject had been read.

The Chairman also referred to the death of Mr. James McMurray, Helensburgh, and it was agreed to record in the minutes the Executive's appreciation of his work.

Nomination of Examiners.

The report of the Committee for Nomination of Examiners was then considered in committee. It was agreed that Mr. Jonathan Innes Fraser and Dr. George Coull be nominated as members of the Board in place of Mr. Thomas Burrell (Montrose) and Mr. J. F. Tocher (Peterhead), and that the other members be re-nominated—viz., Dr. A. A. Boon (Edinburgh), Professor F. O. Bower (Glasgow), Mr. Peter Boa (Edinburgh), Mr. D. B. Dott (Edinburgh), Mr. Thomas Stephenson (Edinburgh), and Mr. Thos. Wilson (Burntisland).

British Pharmaceutical Conference.

The Chairman then called upon Mr. J. R. Hill (Assistant Secretary) to report with regard to the Pharmaceutical Conference at Portsmouth.

Mr. Hill stated that Mr. Dott and Mr. Thomas Stephenson also were present. He praised the Local Committee highly for the arrangements they had made, and stated that the meeting of the Practice Section was a very distinct success. The Assistant Secretary next submitted the report on

Local Organisation,

which indicated the steps that had been taken for preparing a list of Divisional Secretaries for 1912 by the Council. In this connection it was stated that the Executive had been in communication with pharmacists in several districts in Scotland with a view to the formation of new associations, this not coming within the province of the Local Organisation officer (Mr. Woolcock).

The Vice-President (Mr. W. L. Currie) said he had had a good deal to do with the new organisation scheme of the Council. When the matter was mentioned he drew attention to the new officer being expected to visit the Associations in Great Britain—he did not remember if that was the exact phrase. But he asked if Scotland was included in this matter, and obtained the information that the organisation was really intended for England and Wales and that the organisation in Scotland was in competent hands. He then suggested that they should drop the term Great Britain and substitute England and Wales, and that had been done. He ventured to express the hope on that occasion that no hard-and-fast line would be drawn so that the organisation would be debarred from coming to the Scots side of the Border to the meetings of certain local Associations, and there was a general expression of opinion that such should not be the case and that there was no intention to isolate Scotland from the general policy and organisation of the Society. Their desire was to give every opportunity for interchange of opinion between the new organisation officer and the Assistant Secretary on many points. He thought the position had been very fully grasped, and he believed there would be a complete scheme whereby it would be possible to have mutual interchange of opinion on all matters of importance.

Mr. Jack said it was quite necessary to have that. If they had two different organisations working they could not know exactly what was going on. He wished to have a uniform and continuous policy.

The Assistant Secretary stated that the Council had no idea of making Scotland separate from England and Wales in regard to organisation. The Council had arranged, with a view to uniformity and efficiency, that there should be at least a quarterly departmental conference between the office in Edinburgh and the headquarters in London, the plan being that an officer of the Society should go to Edinburgh one quarter and he (Mr. Hill) attend in London in the following quarter, so that there were four conferences every year. The Council had provided that visitations in Scotland should be arranged between the Executive and the local organisations. There would not be, and never had been, the slightest difficulty in having any officer of the Society taking part in the visitations throughout Scotland. He reminded them that on a former occasion, in connection with the Poisons and Pharmacy Act agitation, Mr. Chater visited several meetings in Scotland, and there was nothing to prevent a similar arrangement being carried out at any expedient time.

Mr. Giles hoped it was intended that members of Council should take part in the visitation scheme.

The Vice-President said that had always been his idea, and he thought it should be done.

The Assistant Secretary said that would be arranged wherever possible. They had always acted on that plan in Scotland. He then stated with regard to the changes in Divisional Secretaries that Mr. Peter Irvine had agreed to act in place of Mr. J. H. Riddell for Central Glasgow, while Mr. H. T. Harvie had agreed to take the place of the late Mr. James McMurray in Helensburgh.

The Assistant Secretary also made a statement regarding what he had done and is to do in visiting local Associations.

Mr. Yule pointed out that there were 1,270 chemists in Scotland and only 820 are members of the Society, leaving an adverse balance of 450. They could not congratulate themselves on having only eleven Associations in Scotland. There was no more prudent time for taking up this question. It was absolutely necessary in view of what was before them that they should be organised, and there was not very much time to do it. He moved that a small committee be appointed to report regularly to the Executive as to what was being done in that way.

The Assistant Secretary again explained, and was followed by Mr. Lennox and Mr. Anderson Russell. On Mr. Russell's suggestion the matter was left in the hands of the General Purposes Committee.

The Assistant Secretary next reported on the meetings held in London with Scottish M.P.s and at the Holborn Restaurant with reference to the National Insurance Bill.

Other Business.

Communications from various local Associations were submitted.

The Assistant Secretary reported that Dr. David Ellis, lecturer on botany and bacteriology in the Glasgow and West of Scotland Technical College, Glasgow, has agreed to open the session of evening meetings with a lecture on "The Bearing of Bacteriology on the Work of the Pharmaceutical Chemist."

It was agreed, on the motion of Mr. Forret, seconded by Mr. Fisher, to co-opt Mr. Archibald Currie, Ph.C., Leith, as a member of the Executive to fill the vacancy caused by the death of Mr. Charles Kerr.

Portuguese Pharmaceutical Curriculum.—The Portuguese "Official Gazette" publishes new regulations for the three pharmaceutical high schools attached to the medical colleges of Lisbon, Coimbra, and Porto. The prescribed course of study covers eight half-yearly sessions. Inorganic and organic chemistry, botany, and physics occupy the first two sessions. The third and fourth are devoted to chemical analysis, pharmaceutical zoology, cryptogamy, the laws of fermentation, mineralogy, geology, and hydrology. The subjects for the fifth and sixth sessions are pharmaceutical chemistry, bacteriology, the knowledge of drugs, posology, biological chemistry, and analysis of foodstuffs and medicines; while the last two sessions are devoted to pharmacotechnique, toxicology, and legal analysis, the study of legislation and pharmaceutical deontology. Attendance certificates are awarded, as well as certificates after examination in special subjects. The graduate who has successfully taken the whole course is entitled to the diploma of pharmaceutical chemist.

"Pharmaceutical Formulas."

New and Revised Edition.

THE eighth edition of this popular chemists' book has been published this week at the offices of The Chemist and Druggist, 42 Cannon Street, London, E.C. It contains a great deal of new matter, including several hundred new formulas, a treatise on modern skin-creams, and notes on insects and insecticides. The contents include :

Toilet Preparations and Specialities (68 pages).
Preparations for the Hair (65 pages).
Dental Preparations (44 pages).
Perfumes (68 pages).
Beverages (63 pages).
Culinary and Household Requisites (105 pages).
Horticultural and Agricultural Preparations (24 pages and Appendix).
Writing-materials (38 pages).
Varnishes, Polishes, and Stains (32 pages).
Lozenges (14 pages).
Miscellaneous Preparations (27 pages).
Photographic Chemicals and Preparations (22 pages).
Galenical and Medicinal Preparations (271 pages).
Bacteriological and Microscopic Work Preparations (11 pages).
Supplementary Chapter embracing additional formulas in all these classes (141 pages).
Appendix (22 pages).
Index (49 pages).

The book is a compact volume of 1040 pages (the first three editions contained 662 pages), strongly bound in black buckram. Price 10*s.* net, by post 10*s.* 10*d.* It is stocked by the following houses, from whom it may be obtained at the published price :

Ayrton, Saunders & Co., Ltd., Liverpool.
Barclay & Sons, Ltd., Farringdon Street, London, E.C.
Butler & Crispe, 82 Clerkenwell Road, London, E.C.
Edwards, W., & Son, 157 Queen Victoria Street, London, E.C.
Evans Sons Lescher & Webb, Ltd., London.
Evans Sons Lescher & Webb, Ltd., Liverpool.
Glasgow Apothecaries' Co., Glasgow.
Gower, J., publisher, Waterloo, Liverpool.
Hall, Foster & Co., Newcastle-on-Tyne.
Hatrick, W. & R., & Co., Glasgow.
Hirst, Brooke & Hirst, Ltd., Leeds.
Holmes, W. & R., Glasgow.
Hovenden, R., & Sons, Berners Street, London W.
Ismay, J., & Sons, Newcastle-on-Tyne.
Lennon, Ltd., London and Cape Town.
Lewis, H. K., 136 Gower Street, London, W.C.
Maw, S., Son & Sons, Aldersgate Street, London, E.C.
May, Roberts & Co., 7-11 Clerkenwell Road, London, E.C.
Newbery, F., & Sons, Ltd., 27 Charterhouse Square, London, E.C.
Paterson, W., & Sons, Aberdeen.
Pinkerton, Gibson & Co., Edinburgh.
Potter & Clarke, 60 Artillery Lane, London, E.C.
Raimes, Clark & Co., Edinburgh.
Raimes & Co., York.
Sangers, 258 Euston Road, London, N.W.
Southall Bros. & Barclay, Ltd., Birmingham.
Sutton & Co., 76 Chiswell Street, London, E.C.
Thompson, John, Ltd., Liverpool.
Woolley, J., Sons & Co., Ltd., Manchester.

AT THE COUNTER.

Some Novel Requests.—"Verily the life of the average chemist is strewn with intricate problems!" writes a correspondent, who sends us the appended notes of demands made across a Bradford chemist's counter : canned up fluid, slackdust powder (Seidlitz powder), pangpoo powder (shampoo powder), due to clytus oil, eaugelone, and Scott's emotion.

What the Public Expect the chemist to do for them nowadays is really amazing. A man rushed into a Liverpool pharmacy recently and said, "I want to be sick here." He was politely, yet firmly, told that there was no convenience for that sort of thing, and that he had better cross the street to a public lavatory. To this he objected, as he "did not like the smell of the place." However, there he had to go, but afterwards returned for a draught to soothe his "Little Mary."



Postal Address:
C. & D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C.
Telegraphic Address: "CHEMICUS LONDON."
Telephone No.: BANK 852 (two lines).

INFORMATION WANTED.

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries received since our last issue:

208/21. Hambro tea.
206/39. "Manda" wine.
206/41. Bennett's massage-stone.
206/27. "Salenith Tablets, No. 1."
206/28. "Mother's Help" soothers.
199/60. "Pitmo" or "Pitno" salts.
202/36. "Germide" (? disinfectant).
207/17. "Lion" oil, "Alligator" oil.
202/360. Higginson's sprayer: makers.
208/38. "Sanitary" sterilisable enema.
199/42. "Koh-i-Noor" brand rubber goods.
199/31. "Libra" brand photographic goods.
204/21. "Pick's Fluid": what is it; who makes?
204/20. Address of Keith-Harvey & Co., makers of a deafness-cure.
205/14. "Norgan" or "Norgien," a preparation of sea-weed for a sticking substance.
202/41. Makers of "Perfumed Lozenges" with shield-shaped label in gold and colours, the registered trade-mark being picture of a factory.

INFORMATION SUPPLIED.

During the past week we have answered inquiries as to where the following articles can be obtained, and in many cases we have given the actual makers. The information will be repeated to any other inquirers who send to this Department a stamped and addressed envelope for the purpose.

Andrew Jergen's soaps (200/60).
Ayvad's water-wings (202/27).
Bags for lavender-flowers (203/17).
Bauer & Black's suspensory bandages (199/43).
Bismuth formic iodide (205/14).
"Boroformide" tablets (196/59).
Calla cream (200/50).
Carlyle's Prescription-book (199/410).
Cattle-feeding treacle (199/50).
Celluloid soap-boxes (203/55).
Claresque plate-powder (195/60).
Cream of ammonia (197/19).
Dutch drops ("Haarlemensis" brand) (196/11).
Enamelled-iron bed-pans (200/102).
Glass inhalers (Belgian inquiry) (202/31).
Hammond's rat-poison (202/15).
"Hexo" (197/19).
"Itsem" (199/590).
Jahncke's camphor lockets (201/30).
"Lavolan" (199/59).
"Novio" toilet-paper (200/68).
Opal glassware (Continental makers) (201/45).
"Pillischer" thermometers (188/20).
Potash permanganate (for India) (200/10).
Pots with celluloid lids (199/46).
Powder paper (large leaflets, Continental inquiry) (200/11).
Rennet-essence (for New Zealand) (202/59).
Sequah's Remedies (199/41).
"Solyptol" (197/29).
Splints (maker) (200/100).
Strand Chemical Co. (address) (197/19).
Surgical ligatures (200/101).
Taurocol tablets (202/310).
Tea importers (202/48).
"Telos" fluid (203/28).
Treacle for cattle-feeding (199/50).
"Veritas" anti-rheumatic rings (198/41).
Wicker-covered bottles (201/240).
Window-ticket writers (198/63).
Wolff's "Bisol" plaster (201/24).
"Zit" nail-brushes (197/19).

PRACTICAL RESULTS.

From a Pharmaceutical Chemist:
"Many thanks for your pains and good offices—when other means had failed." (191/8.)

From a Retail Chemist:
"I made an extra profit of 17*s.* out of two inquiries. I therefore thank you for putting me into the right channel." (187/72.)

OBSERVATIONS & REFLECTIONS.

By Xrayser II.

The Case of the Pharmacist

with regard to the double qualification required of him is not exactly parallel with that of Plato's ship's captain to which Mr. Weddell compares it. The captain, it is true, should be both a thorough seaman and a good man of business, but in his case there is no clashing of the one character with the other; he is a seaman at sea, a man of business in port. But the successful pharmacist must be both a man of some science and a good business man all the time. If, in addition to the considerable amount of knowledge he has been compelled to acquire at the outset, he has also acquired a taste for scientific pursuits (which is not unlikely), he may be tempted to cultivate this at the expense of his business. It was, I suppose, some notion of this sort which led an old governor of mine at Brighton, a thoroughly accomplished pharmacist, who had served for five years under Mr. Peter Squire, to ask when I first alighted at his door whether I was

A Major Man.

Hearing that I was not, he said, "Thank heaven! I had forgotten to inquire; if you had been I would have given you a month's salary and paid your fare back to London." I do not think there was then, or is now, very much danger of a pharmacist being overweighted with knowledge, though I know a few young men who appear to have taken on board rather more of that commodity than they were built to carry; but the danger of "a little learning" is that we may mistake its value. It is a fatal error to suppose that a knowledge of pharmacy makes a knowledge of business unnecessary. And although it is well to work as much as possible of our knowledge into our business, there is such a possibility as falling to the ground between two stools. To know, and to know that one knows, is worth much, but even wisdom that is gotten with stripes is, says Ascham, sometimes over-costly, and certainly mere knowledge that is paid for by the loss of one's livelihood is so. My advice to young men (and I have given it before) is to supplement their scientific studies by a year or two's experience in a really good business house.

We are not Out of the Wood

just yet in reference to our position under the Insurance Bill, and while we have much reason to be hopeful, there is also ample cause to be watchful. Mr. Glyn-Jones is quite right in giving credit to Mr. Lloyd George for his spontaneous determination to separate prescribing from dispensing, but we must not forget that the Chancellor is face to face with most determined opposition by the closest trade-union in the country—the medical profession—unless he concedes all their amendments; and I would not be the least surprised to see even yet some attempt to conciliate the doctors by making concessions in some unlooked-for direction. I have all along urged my fellow-pharmacists to take a reasonable line, and not to insist on non-essentials at this stage, and I am glad that Mr. Glyn-Jones thinks our standing in the House of Commons owes not a little to our moderation, though he rather under-estimates his own influence; but if, during the next few weeks, there should be the least symptom of any weakening in the Chancellor's position on the question of dispensing, we must all fight for all we are worth. This is one of the absolute essentials in the interests of the beneficiaries under the Bill even more than ourselves, and it will be an act of treason which we dare not allow were Mr. Lloyd George ever to think of bartering away the rights of the public for any medical mess of pottage.

Many Years Ago

I joined a debating society, or mutual improvement association, as we called them in those days. The chief patron of the society, who was also the guide, philosopher, and friend of every young man who came within his reach, used to offer the young members a few words of welcome and encouragement in this wise:

"Some people when they are asked to join a society always put the question, What am I going to get, or what can I learn, by becoming a member? And if such people continue in that frame of mind they rarely get any good or learn anything. The true attitude of every mutual improvement ought to be, not what am I to get, but what can I give; not what can I learn, but what can I help others to learn: and if you have joined us in that spirit, resolved to put your ideas into the common stock, you will benefit all concerned, but most of all yourself."

My old friend's admonition has stuck to me all these years, and I am reminded of it to-day as I read the sentence you quote from Mr. Naylor's address at the Chemists' Assistants' Association meeting. If Mr. Naylor's fellow-members carried away with them no more than that one sentence—

"The true spirit for a member is not what he can get out of the Association, but what he can put into it and do for it"—

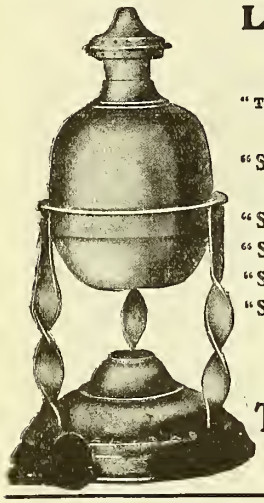
and if they act along the line of this wise utterance, I predict for the Association a very vigorous and a most excellent session.

Elixir Vitæ,

that famous quintessence of the old alchemists, by means of which they held that human life might be indefinitely prolonged, and for which Paracelsus in his "Treatise of Long Life" gives the formula (though for some unexplained reason he failed to demonstrate its virtues in his own person), has often been used by writers of fiction as a leading motive in their romances. The first novelist of any distinction who did this was, I believe, William Godwin, in his "St. Leon," in which the elixir is made to bring only prolonged misery to its victim. This romance seems to have influenced profoundly some of the most brilliant minds of the nineteenth century, and to it is due the frequent recurrence of the idea of "the undying man" in literature and art, from Shelley to Wagner, though it is, comparatively speaking, only in a few writers that the elixir itself occurs. It does so, however, several times in Hawthorne, who confessedly borrowed it from Godwin, first in "Dr. Heidegger's Experiment," and afterwards in the longer but unfinished romances "Septimius Felton" and "The Dolliver Romance," treating it in different ways as his subtle analytic intellect suggested. His most characteristic thought with regard to it is perhaps found in the reflection that if man were to live longer on the earth "the spiritual would die out of him." Balzac makes a ghastly use of the elixir in his short story, "Don Juan." Dumas, who uses it twice, has been accused of "lifting the idea bodily" from Godwin or Hawthorne, though it is not apparent why this charge should be made against him specially, since Bulwer Lytton in both "Zanoni" and "A Strange Story," and Ainsworth in "Auriol" lift it from somebody. Here is the formula given by Paracelsus:

Quintessence of gold, half an ounce; quintessence of pearls, half an ounce; quintessence of saffron, quintessence of celandine, and quintessence of balm, of each five drachms; of the herb hellebore and of the flowers of secta croa, a quantity not stated.

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Editorial Articles.

The Menthol Market.

Among the many articles of produce which have recently advanced in price menthol has perhaps attracted most attention, and as the market is now passing through one of those meteoric periods so characteristic of the article attention may be called to one or two of the leading features. At the outset it may be said that the present prices on the spot, which are unprecedented, are at a dangerously high level. Some, however, look for their continuance, with more or less slight reactions for perhaps the remainder of the year, and little relief can be afforded until the bulk of the shipments arrive from Japan, which is usually in December and January. Looking at the actual situation as it is to-day, it would appear the United States is largely responsible for the present acute famine, as the steady buying from that quarter, coming somewhat unexpectedly on extremely small spot supplies, has brought the market to starvation point, a position perhaps hitherto unknown in the history of menthol. It is estimated that there are less than fifty cases in London, and the spot market is such that the usual operators are now without stock, the recent activity having cleared them out. Spot business to consumers is therefore infinitesimal, and principally consists of broken bulk (5-lb. tins), especially when it is considered that a single case at 30*s.* per lb., which price has been paid, is worth 90*l.*

The nearest approach to the present rates was in 1903, from May to July, when the ruling spot prices were from 22*s.* to 25*s.*, but there was not then the extreme scarcity now prevailing. The present unique position points to the fact that the consumption of menthol must have increased considerably, and when it is considered that United States buyers have had to fall back on London it shows that there is an undoubted scarcity on that side also, advices indicating that single cases are not to be had, buyers having recourse to 5-lb. lots. Indeed, it may be said that there is very little stock at any of the principal centres, and that consumers everywhere are also short. During the flurry last week the principal buying commenced at 16*s.* 6*d.*, at which several sellers parted with their holdings. The market rapidly rose to 18*s.*, and this week from 25*s.* to 30*s.* per lb. has been paid for spot stuff by single cases; some of this business is merely of a professional character in order to sustain interest. Little reliance can be placed on what the Japanese production of menthol and oil will be this season, but undoubtedly there is a serious shortage, said to be about 600 cases, or 36,000 lb., of menthol. There are so many reports current on this point that we give the figures with reserve. A feature of this season is that so few transactions have occurred for forward delivery (*i.e.*, delivery during this month and November), so those who have any spot stock can virtually command what price they like. This is the position at the moment, but it must not be overlooked that there have been offers this week for forward delivery down to 17*s.* 6*d.* c.i.f. for distant shipment, this, of course, pointing to an eventual slump.

In the following table we trace the principal movements of menthol and oil during the year :

1911	Menthol		Peppermint Oil	
	Spot	c.i.f.	Spot	c.i.f.
January ...	11/9 to 12/9	11/– to 12/3	6/3 to 6/6	5/9½ to 6/6
February ...	12/9 to 17/9	12/3 to 16/3	6/4 to 8/–	6/6 to 8/–
March ...	*16/6 to 15/–	16/– to 14/3	7/6	7/6
April ...	15/– to 15/9	15/– to 15/6	7/3 to 7/9	nom.
May ...	16/– to 16/3	15/3 to 15/6	7/– to 7/2	nom.
June ...	15/9 to 16/–	15/9	6/10	nom.
July ...	16/– to 16/9	15/4½ to 15/9	6/11 to 7/–	5/10⅜ to 6/–
August ...	16/6 to 16/7½	14/9 to 14/10½	6/10 to 6/11	5/8 to 5/6
September ...	16/– to 16/3	15/6 to 14/–	6/3	5/3 to 5/7½
October** ...	15/10 to 30/–	13/6 to 17/–	6/– to 6/9	5/6 to 6/–

* 14/– to 14/10 paid in auction without reserve.
** To October 26.

We also give the exports of menthol and oil from Japan month by month during 1910 and 1911 (kin=1.3 lb.) :

—	Menthol. Kin		Peppermint Oil. Kin	
	1910	1911	1910	1911
January	8,767	16,019	18,946	20,109
February	14,274	25,729	18,998	37,235
March	6,615	6,968	16,240	12,511
April	2,837	3,152	11,203	2,640
May	12,159	2,837	10,045	1,469
June	9,970	2,201	6,225	2,385
July	6,584	8,506	6,332	8,038
August	9,121	—	1,463	—
September	7,236	—	9,433	—
October	17,632	—	16,757	—
November	12,170	—	14,056	—
December	9,557	—	6,801	—

As regards the United States, the imports for the twelve months ending June 30 (as published by the Bureau of Statistics) for the past four years were as follows :

	Lb.	Value $
1907	20,665	29,160
1908	20,183	33,240
1909	23,975	36,963
1910	23,051	43,234

In view of the fact that the United States is such a large producer of peppermint oil, it might have been thought that efforts would be made to produce menthol also, while the price rules so high. This would, of course, necessitate a more complicated process than simple freezing out, but the present price should well repay the extra trouble.

Customs and Excise.

The second annual report of the Commissioners of Customs and Excise since these two Revenue Departments of the United Kingdom were amalgamated was published on Wednesday. It is the fifty-fifth report relating to the Customs and the fifty-fourth of the Excise, while being the first to embody full receipts from the revolutionary changes introduced by the Finance (1909-10) Act, 1910, which received the Royal assent on April 29, 1910, it is of exceptional interest. It shows net receipts from Customs of a little over 33,000,000*l.* and from Excise of over 40,000,000*l.* during the fiscal year which ended on March 31, 1911. As regards Customs, the most notable feature of interest to the chemical and drug trades is the alteration in the amount imported of chloral hydrate and other articles in which alcohol is the basis. It will be remembered that the duties on chloral hydrate, chloroform, collodion, ethyl ethers and esters were altered on consultation between the Revenue Authorities and representatives of chemical industry, the advance in the spirit-duty being an opportunity for putting the duties on a parity, which they were not before. The receipts from chloral hydrate have increased from 1,467*l.* in 1909-10 to 2,281*l.* last year; chloroform has diminished from 84*l.* to 83*l.*, collodion from 107*l.* to 4*l.*; acetic ether has increased from 185*l.* to 195*l.*; butyric ether has diminished from 486*l.* to 277*l.*, and sulphuric ether from 96*l.* to 42*l.* The ethyl esters are about the same, except ethyl chloride, which has yielded 75*l.* of revenue, compared with 105*l.* in the previous year. It thus appears that the effect of levelling up the duties, so as to exclude the possibility of a bounty to foreign manufacturers, has been to increase internal production, if we may consider that the diminished importation means greater internal production. The yield of duties on spirituous liquors and tobacco is greater than in the preceding year, on account of the increased rates of duty. Tea also increased remarkably, although the duty was the same, the yield being 5,930,008*l.*, or about a quarter of a million more, while cocoa also showed an increase of fully 10 per cent., and coffee was about 1,000*l.* less.

Of the 40 millions of revenue obtained from the Excise about 18½ millions was obtained from home-made spirits and 12¾ millions from beer. The annual consumption of spirits, home-made and imported, per head of the population increased apparently last year compared with the previous abnormal year, but there was an actual decrease, the figures for the United Kingdom being 0.68 proof gal. of spirits and 26.1 gals. of beer, compared with 0.87 and 26.47 in 1909. The *per capita* consumption of spirits in England is 0.61 proof gal., in Scotland 1.15, and in Ireland 0.74, these being decreases on 1909. There are no corresponding figures for beer. Dr. Dobbie, Principal Chemist to the Government, in his annual report dealt with the spirit-figures as regards methylation : more detailed statistics are given in the Commissioners' report. It is shown that in England last year 5,770,222 proof

gals. of home-made spirits and 49,836 proof gals. of imported spirits were received by makers for methylation, Scotch makers received 839,851 proof gals. and Irish makers 71,121 proof gals. of home-made spirits, the total for the three Kingdoms being 6,731,030 proof gals. Of this total 4,323,452 proof gals. was for industrial spirit, and the methylators received allowances amounting to 54,534*l.* in respect to this, the figures being the highest on record. During the year 2,877,429 bulk gals. of industrial spirit and 1,688,313 bulk gals. of mineralised spirit were sent into consumption by makers. The report also shows the amount of pure spirit issued duty-free for use in arts and manufactures and by scientific institutions, substantially as Dr. Dobbie reported, the total being 545,566 proof gals. of home-made spirits and 4,318 of imported spirits other than methyl alcohol, and 78,091 gals. of imported methyl alcohol. Only 180 gals. of the last-named was used at scientific institutions, the rest being employed in arts and manufactures. As a matter of fact, the artificial-dye industry in this country is steadily improving on account of the greater freedom with which manufacturers are allowed to use ethyl and methyl alcohols. The medicine stamp-duty yield shows an increase from 313,114*l.* in 1909-10 to 325,646*l.* in 1910-11. Of the latter total 322,696*l.* is for stamps sold in England and 2,950*l.* for stamps sold in Scotland. The licences issued in England increased to 39,430, or 317 more than in the previous year, while in Scotland they diminished by 33 from 3,300 to 3,267. We have frequently pointed out that the yields of stamp-duty fluctuate, a high and a low year generally alternating, and the figures do not favour the idea that there is a steady increase year by year. The best year during the past decade was 1907-8, when the total yield of stamp-duty was 334,142*l.*

A certain number of the Excise duties are now collected by the local authorities or through the Post Office; for example, armorial bearings, as to which it is not an uncommon belief that the local authorities are harsher than the Inland Revenue were. We can see little indication of this in the figures. Thus, in the year 1908-9, the last in which the Inland Revenue issued licences, there were issued in Great Britain over 55,000 licences for armorial bearings, while in the year following the number diminished by over 3,000, and last year it was still short by fully 1,000 of the 1907-8 figures.

A State Dental Service.

An interesting alternative to the Dentists Bill, which the British Dental Association has now dropped, is put forward in the Association's "Journal" by Mr. F. J. Blight, L.D.S., who recognises that for the dental requirements of the country qualified dental practitioners have not been and are not turned out quick enough. The proposition is to establish (1) a State dental service with municipal or national control, (2) State dental hospital, clinics, and training-school, (3) examinations for entry into State service only. The students would be prepared for these examinations first of all at ordinary dental hospitals and later at State hospitals. The conditions of entry to be a modification of the requirements for the L.D.S., and to be of a thoroughly practical nature. The students on qualifying for State service should be drafted to the State hospital, dispensaries, or clinics, which would gradually become established all over the country. A State dentist would *only* practise at a State depôt, but he might, if he wished to qualify for L.D.S., leave the service and commence private practice; on the other hand, a man may be admitted as a L.D.S. and take the State examination, commencing his career as a State dentist for a while and settle in private work afterwards if he chose to do so. The unregistered dental practitioners existing now would be allowed *sine curriculo* to attend State examinations and be drafted into State service. The remainder failing to come up to the requirements for State practice might be employed and taught mechanics at various State departments and depôts for making dental appliances. The number required for State service for attending 20,000,000 people would be about 8,000 dentists, and the probable cost 2,500,000*l.* The cost could be defrayed thus: Employer of labour, 6*d.* per head per annum; employé, 1*s.* per head per annum; State, 1*s.* per head per annum. Thus the State alone would on this basis pay 1,000,000*l.* a year, which Mr. Blight states is not a great deal compared with 60,000,000*l.* which is at present spent upon public health, poor relief, and education. It would probably take some ten or fifteen years to establish a wholly efficient State dental service.

Mr. Blight then refers to a municipal scheme, taking Liverpool as the example, where a ½*d.* rate produces 8,000*l.* per annum. The municipality could therefore employ, if necessary, thirty-six whole-time dentists at 200*l.* a year, or if part-time dentists were employed as well, there are many young practitioners who would be willing to devote their mornings to work in State service for a salary of, say, 100*l.* a year. If a scheme were a contributory one on the part of the employer and the employé, and worked on a basis that the whole-time dentist sees forty patients a week, thirty-six will manage 1,440 per week or 72,000 patients a year. If the employer and the employé each pay 1*s.* per head per annum, this would produce roughly 7,200*l.*, so that the rates would have to make good some 800*l.* a year. For private practitioners there would remain the people earning over 160*l.* a year, who are left out of this scheme as in the National Insurance Bill, and also those patients with smaller incomes who do not care to go to a State depôt for dental treatment.

Chemists' Associations in Scotland.

There was a small dispute at the meeting of the North British Branch Executive last week as to the number of Chemists' Associations in Scotland. On paper there are a baker's dozen, including two junior associations, but repeated inquiries by us during the past few weeks have failed to elicit responses in regard to the Dumfries and Maxwelltown and the East Aberdeenshire Associations. If these are dead the number is reduced to eleven.

Dutiable Medicines.

It is a well-established practice of the Revenue departments that periodically special attention is given to inspection in different branches of the Revenue. The time for chemists appears to have come round again, if we may judge from many inquiries addressed to us, and medicines and exciseable medicinal wines have to be carefully looked after at present. We report a case at Bow Street under the Medicines Stamp Acts in this issue, in which the offending articles were all imported from America. Quite independent of this, the British agents for Mennen's toilet-powder have issued a circular letter to the trade calling attention to the fact that this powder as put up in the United States is liable to medicine stamp-duty when imported and sold in Great Britain. The British packing was long ago submitted to the Commissioners, who decided that it does not require to be stamped. The present trouble is due to the fact

that the American packets have been imported by "third parties," and sold to retailers, without recognition of the fact that it bears recommendatory matter which brings it within the charge of duty. Another point which requires the attention of manufacturers and retailers is the labelling of known, admitted, and approved remedies. The use of fictitious formula numbers, or numbers which almost defy identification of the formulæ, does not secure exemption, and the authorities are looking after these. Medicines are also excluded from the exemption when exclusive titles and possessive-case names are attached to them. We have noticed that this provision is somewhat frequently ignored.

Seasonable Window-shows.

By Arthur E. Bailey.

THE high-class pharmacist need not condescend to drug-store methods in order to make his windows attractive and profitable. He can use them for paying displays and still retain his status and the dignity of his calling.

Window-shows naturally depend on the neighbourhood and class of business. The drug-store can show cut lines in patent medicines to advantage where the pharmacist may not be able to do so; but the pharmacist who stands for pure drugs should be able to make effective displays of these and the medicines prepared from them. In illustration, take a few of the common household remedies that are in demand just now when colds are prevalent, and see if the pharmacist cannot make something out of them in the way of window-shows. Suppose we take pine, menthol, eucalyptus, camphor, quinine, cinnamon, and liquorice. For these shows the bottom of a large window covered with linoleum is best where one has a large flat surface, but they can be made to fill any window by a little arrangement.

Pine, Eucalyptus, and Menthol.

These three frequently occur in combination, and there is a popular demand for them. Cover the whole of the bottom of the window with fine crystals of Epsom salts or anything else you can think of to imitate menthol. Then take whole eucalyptus-leaves of good shape and arrange from front to back at intervals in artistic curves. Place a row of pine-cones along the front, and drape the back of the window with pine branches. As to the goods, anything is admissible which is used for coughs or colds, and which contains pine, eucalyptus, or menthol, *e.g.*:

> Pine oil, pellets, pastilles, and wool; eucalyptus oil, pastilles, snuff, sprays, and smelling-salts; menthol inhalers, pastilles, cones, and snuff; pastilles containing any or all of these ingredients; eucalyptus and menthol nose wool.

All should be tastefully and artistically arranged in individual groups.

Liquorice.

Liquorice pellets are now replacing to a great extent the old-fashioned stick liquorice, but a good sale for the latter is still to be found in some districts. The pellets can be bought in 3*d.* and 6*d.* tins, combined with a variety of medicaments, such as chlorodyne, menthol, eucalyptus, marshmallow, etc., and these are generally splendid sellers if well displayed. Get about 14 lb. of liquorice assorted in 1 oz., 2 oz., and 4 oz. sticks, and three or six dozen 3*d.* assorted tins. Cover the bottom of the window with the bay-leaves in which the liquorice is packed, and on this arrange stick liquorice and tins well assorted. At intervals place a few bundles of clean scraped liquorice-root. At the back put several 2-lb. glass-stoppered lozenge-jars about 12 in. apart, and build up the spaces with large liquorice sticks. In the jars place liquorice jujubes, pellets, liquorice and ammonium-chloride lozenges, linseed, liquorice, and chlorodyne lozenges, and small liquorice sticks. This was a very effective window-show, and proved a very profitable one also.

Camphor.

Acid. boric. crystals or clean bay salt will do very well as a floor covering. Camphor wood in small logs makes an interesting addition, and original full tin boxes of camphor blocks with the Japanese label. In the centre place a large camphor bell (if you can get it), and fill the inside with ¼ oz. blocks. Camphor is not suitable for display in a window which gets much sun, but in a shaded window in the winter volatilisation is not great. I found last May that a ¼ oz. square in a window shaded by a sun-blind lost 10 grains in less than a week. With 7 lb. of camphor exposed in such a position the loss by volatilisation would be considerable. Groups of the following are to be placed about the window among various sizes of camphor blocks: Camphorated oil, camphor pilules, essence of camphor, syrup of camphor (cough-mixture), camphor and quinine cold-cure tablets, and paregoric as compound tincture of camphor. Camphor ice is also admissible.

Quinine and Cinnamon.

These two seem to have become associated in the public mind and sell very well in combination. For this show cover the bottom of the window with dark green paper. Get some good cinnamon-quills and cinchona-bark. Place a heap of about 10 oz. of quinine in the centre of the window and sprinkle a little about the window like snowflakes. It can always be made into solution and strained later on for tr. quin. ammon. Spread small bundles of bark and quills over the bottom of the windows and then arrange the following goods: Tr. quin. ammon. (also in capsules), quinine and cinnamon capsules, essence of cinnamon, aromatic tincture of quinine (B.P.), cinnamon tablets, and quinine tablets. Take two teaspoons, fill one with water, and in the other place a capsule of tr. quin. am. and label:

"*One capsule is equivalent to one teaspoonful of ammoniated quinine, and is much pleasanter to take.*"

Weigh 1 grain of quinine and place it on a threepenny piece, place beside it a 1-grain coated quinine tablet, and label:

"*The old way and the new.*"

The back of the window may be filled up with orange-quinine wine and quinine-and-iron tonic alternately placed.

There are a number of drugs which the pharmacist may treat in the same way, according to the different seasons of the year. These notes just give four suggestions for the winter. The following hints will apply to most window-shows where drugs are used:

1. Where materia-medica specimens are shown the best that are obtainable should be used, and a neatly written white card should bear the name and natural order and the particular drug derived from each.
2. Show the specimens in flat glass trays, if possible, and liquids in well-stoppered white-glass bottles with good labels.
3. Price everything in the window that is for sale.
4. Keep different articles separate, and make small groups of each. Don't crowd the windows.
5. Windows should be spotlessly clean and dustproof. Remember that customers are supposed to eat the things they see in the window, and dead flies and dust do not help to make them appetising.
6. Keep a good display on the front counter of articles similar to those shown in the window. If the window-show brings customers into the shop it is easier and more agreeable to them to show you the required article on the counter than it is for them to describe it, and the second show inside very often clinches the matter with a customer for other lines whom the first show outside only left undecided.

Little things in common use make suggestive additions to many of these displays, such as a lump of sugar beside essence of camphor or eucalyptus oil, with a written card—

"*Take 5 drops on sugar and get rid of your cold.*"

A teaspoon and a dessertspoon surrounded by bottles of cough-mixture, and the words—

"*A teaspoonful for a child; a dessertspoonful for an adult.*"

Anything that will arrest attention and cause the passer-by to stop and look again; though the high-class man must studiously avoid anything that is vulgar, cheap, or smart. Simple drugs are not yet played out, in spite of the increase in the number of patent medicines; and the up-to-date man who makes the most of them and the scientific knowledge he possesses can still earn a comfortable living.

"Diseases and Remedies."—The fourth edition of this useful book for chemists has recently been published by the *C. & D.* It is a concise survey of the most modern methods of medicine, telling the nature of ailments and describing the methods of treatment. The fourth edition has been carefully revised by a general medical practitioner, and certain parts of the book have been entirely rewritten. It is published at 3*s.* (by post 3*s.* 3*d.*), and can be obtained from the *C. & D.* offices in London or Australia and from the wholesale and sundries houses.

SCIENTIFIC PROGRESS.

Temperatures under this heading are on the Centigrade scale.

Hyperel is a compound the composition of which is not yet known publicly, but which, when dissolved in water, gives at once a solution of hydrogen peroxide of high strength. It is a combination into which urea and citric acid enter.

Strophanthin.—Seulier ("Apotheker Zeitung," 1911, 755) has isolated a glucoside from the bark of the oleander, grown in Algeria, which gives all the characteristic reactions of strophanthin. It is probably identical with the pseudo-strophanthin of Feist, or the lævo-strophanthin of Thoms. This bark is suggested by the author as a possible source for the manufacture of pharmaceutical preparations having the same action on the heart as strophanthin.

The Analysis of Liquorice-juice.—Following on the papers published in this journal and several foreign journals on this subject, a communication has just appeared by L. and J. Gadais ("Bull. Soc. Chim.," 1911, 741) dealing with liquorice analysis. There is nothing new in the general matter of the paper, but the following method for the determination of glycyrrhizin is recommended. Five gr. of the sample is dissolved in hot water to make 50 c.c., to which 100 c.c. of 95-per-cent. alcohol is added. After twenty-four hours the liquid is decanted from the deposit, which is washed in a filter with 15 c.c. of dilute alcohol three times. The combined liquids are evaporated to 25 c.c., made up to 50 c.c. with water, and 5 c.c. of water containing 1.8 c.c. of strong hydrochloric acid added. The precipitate, after standing for twelve hours, is washed three times with 10 c.c. of ice-cold water, 0.5 c.c. of ammonia added, and the residue dried at 100° and weighed as ammonium glycyrrhizate.

An Important Synthesis.—Hydrastinine, which is official in the German Pharmacopœia in the form of its hydrochloride, is one of the most valued remedies for certain forms of internal hæmorrhage. It has been obtained by fairly simple processes from the alkaloid hydrastine. Decker ("Zeit. f. Angew. Chem.," 1911, 40) has now synthesised it, using piperonal as his starting-point. By condensing this body with hippuric acid, an acid is formed which by the action of ammonia is converted into the imido compound homo-piperonyl-piperonyl-alanin. By the elimination of carbon dioxide the corresponding amine results. This is easily converted into a piperonyl substituted quinoline derivative, which is readily broken down into piperonal and hydrastinine. Thus the body from which the synthesis starts is again produced, and can be used over again. Piperonal, known as heliotropin in the perfume industry, is cheaply made from safrol, the waste residues of the manufacture of camphor from camphor oil, so that safrol is the crude material from which the base is made. In a similar manner myristicin, the well-known constituent of nutmeg, dill, and parsley oils, can be used as the starting-point for the synthesis of the base cotarnin, which in the form of its salts is known as styptol and stypticin.

Permanence of Astringent Preparations.—Mr. Wilbur Scoville publishes in the "Bulletin of Pharmacy" a useful account of investigations which he has made during the past three years on the permanence of astringent preparations, and in particular of fluid extracts and tinctures containing tannin. Nineteen preparations in all were kept under observation, and the general result obtained leads to the suggestion that in order to be permanent tannin preparations should be strongly alcoholic, and conversely, preparations which are undesirably astringent may be rapidly freed from tannin by using a weak alcoholic menstruum. Thus a fresh fluid-extract of wild cherry, 38 per cent. spirit, is strongly astringent, but after standing a few weeks it loses most of this astringency. At the end of the three years it was found that tincture of gambir (catechu), made with 49 per cent. spirit, tincture of kino, made with 60 per cent. spirit, and fluid-extract of nut-galls were the only preparations that remained unaffected to any material extent. Fluid extracts of logwood, rhatany, rose, and oak kept well for two years, but signs of deterioration have now appeared. Wild cherry, witch-hazel, and some others lost astringency, quite rapidly in certain cases. A few preparations gelatinise, but not until all the tannin is changed, and precipitation may occur without the loss of tannin. All these facts are very interesting, and should be kept in view, particularly in connection with such preparations as concentrated decoction of logwood, infusion of roses, and other astringent preparations which have hitherto been preserved with a minimum amount of spirit.

The following appear among the imports into the Congo last year: Drugs, 4,600*l.*; chemicals, 2,700*l.*; medicines, 1,400*l.*; and soap, 4,800*l.*

DENTAL NOTES.

Non-breakable Plaster Models.

Into the warm water in the mixing-bowl put two or three drops of fish-glue, and vigorously stir before the plaster is added. This gives a very hard model which is excellently suitable for repair-work.

Properties Required by a Cement Filling.

A Good Cement-filling Material has many points which require to be considered before it can be a success. Among those to be considered the following may be noted as important:

(1) *Strength.*—It requires strength so that it may withstand any strain, such as in biting.

(2) *Insolubility.*—It must not be readily acted upon by the fluids of the mouth, which with many fillings cause them to gradually dissolve away.

(3) *Adhesiveness.*—It must have a certain amount of adhesiveness, which is a great help in those cavities where it is difficult to prepare undercuts.

(4) *Natural Appearance.*—It must approach the natural tooth in appearance, colour, translucency, etc., as nearly as possible.

(5) *Conductivity.*—It must not be a too ready conductor of heat and cold, which, if the cavity is very large and near the nerve, would keep the latter in a constant state of irritation.

(6) *Polish.*—It must take a high degree of polish in finishing.

(7) *Manipulation.*—It must be easy to work, neither setting too rapidly nor too slowly; but this will depend on how it is mixed to a great extent.

No manufacturer can make a satisfactory cement for the dentist who does not mix it properly, and whichever filling material is used, the directions given by the maker should be followed faithfully in every detail. A very poor filling may be made from the best materials, and all the above points may disappear if care is not taken and the directions followed.

Dental Sedative.

Professor Jung, of Berlin, in a recent article on "Sedatives in Dental Practice," strongly recommends the use of adalin, the sedative introduced as a sleep-producer by the Bayer Chemical Co. (*C. & D.*, March 4, 1911, Col. Supp.). Chemically it is bromodiethylacetyl-carbamide, and it acts according to the dosage either as a sedative or hypnotic. While not underestimating the personal influence of the dentist in calming an excited and nervous patient, Professor Jung wished to find some reliable sedative which would calm all those nervous and highly-strung patients who look forward to a visit to the dentist with fear and trepidation. The conditions which Professor Jung expects from a sedative required by dentists for this purpose are:

(1) The remedy must act promptly—*i.e.*, it must exhibit a soothing influence, say, within half an hour.

(2) It must retain its influence for not less than an hour, and, if possible, for not longer than three or four hours.

(3) It must also be applicable in the case of children and delicate persons—that is, it must not give rise to injurious consequences which only a strong constitution can easily withstand.

All these conditions Professor Jung finds fulfilled by adalin, and he has succeeded in more than 90 per cent. of his cases in obtaining with the help of a single dose such a complete tranquillisation of mind in timid and nervous patients that he has always been able to carry out the necessary work afterwards without any difficulty. Doses of 5-10 grains he finds to exert within a quarter to half an hour marked sedative action, lasting from three to four hours. The best way to take adalin is to place a tablet on the tongue and follow with a hot drink. Adalin is not soluble in cold water, and drinking something hot immediately after taking the tablet ensures quicker action of the drug. When experimenting with adalin Professor Jung discovered that, should any local or general anæsthetic require to be given to the patient, much less of the anæsthetising agent is required if adalin has been given previously.

ASSOCIATION AFFAIRS.

Association Presidents.

The Fifeshire Pharmaceutical Association is one of the youngest of the kind in Great Britain, having been founded two years ago, but it has proved to be particularly influential in its operations, especially in regard to the National Insurance Bill, as to which it was the first provincial body to point out that Clause 14 in the Bill as originally introduced did not give effect to Lloyd George's initial annunciation about the separation of dispensing and prescribing. Since its formation the Association has been presided over by Mr. David Gilmour, Ph.C., of Dunfermline, who succeeded Mr. David Storrar, of Kirkcaldy, as a member of the Council of the Pharmaceutical Society of Great Britain. Mr. Gilmour comes of a farming stock who have tilled Fife soil. He was apprenticed to his brother, the late Mr. Andrew Gilmour, Ph.C., of Burntisland, and subsequently was for a short time an assistant with another brother, Mr. William Gilmour, of Lindsay & Gilmour, Elm Row, Edinburgh. While in Edinburgh he passed the Minor examination in May 1870, and the Major in June 1873; subsequently he bought an old-established business at 40 Bridge Street, Dunfermline, to which he later added 56 High Street, Dunfermline, a business managed by his son, Mr. John Gilmour, Ph.C. Mr. Gilmour has long taken an active interest in pharmaceutical affairs, as a member of the Executive of the North British Branch of the Pharmaceutical Society and a member of the Board of Examiners for Scotland. He has at different times communicated papers to the scientific meetings of the Branch. Locally he is one of the most respected citizens of the Royal Burgh, and has participated in the administration of various organisations, such as the Carnegie Hero Fund and other modern movements which Andrew Carnegie has inaugurated in his native town. He can handle a golf-club well, still likes a spin on his bicycle, and is Session Clerk of the leading U.F. Church in Dunfermline.



Mr. D. Gilmour.

Brief Records.

Sheffield Pharmaceutical and Chemical Society.—At a meeting of the Council held in the Literary and Philosophical Society's Rooms on October 23, the following officers were elected for the ensuing year: *President*, Mr. G. T. W. Newsholme; *Vice-Presidents*, Mr. Jno. Evans and Mr. R. D. Douglas; *Hon. Treasurer*, Mr. Geo. Owen; *Hon. Secretary*, Mr. H. Antcliffe; *Auditors*, Mr. E. Wells Smith and Mr. E. Hands; and *Librarian*, Mr. P. H. Culverhouse.

Halifax Chemists' Association.—At the meeting addressed by Mr. Woolcock on Tuesday, October 17, under the presidency of Mr. W. R. Black, the following were present: Messrs. Bottomley, Brierley, Chambers, Fielding, Gibson Dixon, Hodgson, Moores, Sutcliffe (Secretary), J. Swire, P. W. Swire, Thompson, and Tiffany. Mr. B. S. Hodgson was nominated for appointment as Divisional Secretary for the ensuing year, Mr. W. R. Black, the present holder of the office, having expressed a desire to be relieved of it.

Stockton-on-Tees Chemists' Association.— The first annual meeting of this Association was held at Tate's Café on October 17, presided over by the retiring President, Mr. W. Finlayson. It was agreed that the members should conform at once to the regulation regarding the sale of liquid ammonia. The following officers were appointed: Mr. A. H. Mossom, *President*; Mr. Skilbeck, *Vice-President*; Mr. Ed. Gregory, *Secretary*; Mr. T. Salmon, *Treasurer*; Mr. J. Middlemass; the above to be the Executive Committee with Mr. Walker.

Oldham Pharmaceutical Association. — On October 24, at Oldham, Mr. Jas. Grier, M.Sc., Ph.C., Manchester, gave a continuation of his lecture on "Modern Synthetic Remedies," which was much appreciated, and at the close of the lecture a hearty vote of thanks was accorded the lecturer. Messrs. Radcliffe, Jacques, Buckley, Bullions, and Whittle were elected members, and Mr. Cooling was elected an Associate of the Association. Mr. Baker brought for inspection a collection of fungi, the proceeds of a ramble at Broadbottom.

Newport (Mon.) Pharmacists' Association. — The annual meeting was held on October 24 at the Secretary's house. There were present Messrs. Davis (President), Findlay, Gratte, Benson, Harries, Giles, Paine, Menhinnick, Williams, Badget, Stonelake, and Lloyd Jones (Hon. Secretary). The annual report on the year's work was received and adopted. The election of officers resulted as follows: Mr. A. Gratte, *President*; Mr. Lloyd Jones, *Hon. Secretary*; and Messrs. Davis (past-President), Menhinnick, and Findlay, *Committee*. After a short discussion, it was decided to invite the Monmouth County Pharmacists to join Newport, or be federated as Associations.

Chemists' Assistants' Association.—The first of the series of social and musical evenings which have been arranged for the present session was held on October 19 at 73 Newman Street, London, W. In addition to the President (Mr. F. Naylor) and Secretaries (Messrs. Phillips and Styles), there were present Dr. Walmisley, Messrs. S. C. G. Tweedy, A. R. Arrowsmith, W. Roberts, F. K. Loxley, A. Haigh, and others. The musical programme consisted of pianoforte sketches by Mr. P. B. Phillips and songs by Messrs. R. Malone, H. Grange, and E. Thompson, Mr. A. Haigh officiating at the piano. The remainder of the evening was taken up with cards and magazines.

Organisation Meetings.—Last week Mr. W. J. U. Woolcock, Local Associations' officer of the Pharmaceutical Society, addressed meetings of the following Chemists' Associations: Halifax, October 17, Mr. W. R. Black presiding; Harrogate, at 25 Parliament Street, on October 19, Mr. G. Paterson (President) in the chair; Keighley, on the same afternoon: Leeds, on October 18, Mr. J. H. Beacock in the chair; and Scarborough, on the evening of October 20, Mr. W. A. Senior presiding. At York, on the afternoon of October 20, Mr. Woolcock had a conference with Mr. F. C. Hey (President) and Mr. T. C. Atkinson (Secretary) of the local Association. In all cases approval of the Society's scheme of local organisation was expressed.

Oxford Chemists' Association.—The first meeting of the sixteenth session was held at the Golden Cross Hotel, Oxford, on Wednesday, October 18, Mr. J. Palmer (President) in the chair. Messrs. C. Bellamy, J. Burbank, Alderman Clayton, S. Clegg, J. Dolbear, and H. C. Goodall (Hon. Secretary) were also present. The Secretary reported on what had been done regarding the National Insurance Bill. Mr. J. A. R. Burbank was nominated for re-election as Divisional Secretary. Mr. Dolbear then gave a highly interesting *résumé* of the proceedings of the *British Pharmaceutical Conference* held at Portsmouth, his concise and intelligent review of the papers read being greatly appreciated by the members present. On the proposition of the President, seconded by Mr. Bellamy, a hearty vote of thanks was accorded him. Alderman Clayton, another delegate, added a few humorous remarks bearing on the social part of the Conference. Both delegates agreed that the Local Committee was entitled to high commendation for the manner in which the whole proceedings were so successfully carried through.

Cardiff Pharmaceutical Association.—A meeting was held at the Angel Hotel on October 25, under the presidency of Mr. Leo Joseph. The annual report was submitted by Mr. W. R. Williams (Hon. Secretary) and adopted, after which the meeting elected officers and committee for the ensuing year as follows: *President*, Mr. E. Poole: *Vice-President*, Mr. J. D. Jenkins: *Treasurer*, Mr. Leo Joseph; *Hon. Secretary*, Mr. W. R. Williams; *Assistant-Secretary*, Mr. T. Lea; and *Committee*, Messrs. A. Hagon, G. Thomson Williams, Reginald Davies, A. T. Mogg, Jabez A. Jones, A. W. J. Evans, Ben Reynolds, S. B. Eason, and J. Murray. It was decided to renew the subscription of 2*l.* 2*s.* to the infirmary. Mr. S. B. Eason read a paper on "The Sale of Laudanum," but it was confined almost entirely to a recapitulation of the circumstances attending the suicide of a customer of his from taking laudanum, and to the evidence he gave at the inquest. A long discussion followed regarding the custom of the trade in selling or refusing to sell poison. It was decided to hold a whist-drive on November 18, the Head Constable having intimated that he would take no action in cases where the prizes competed for were given.

British Pharmaceutical Conference.—We are asked to state that the Research Sub-Committee will meet shortly to consider applications from members of the Conference for grants in aid of research. Full particulars should be given as to the nature of the work the applicant proposes to undertake and the approximate amount required. The Conference publishes a list of subjects suitable for research, and the sub-committee feels that there are many pharmacists throughout the country who from a variety of causes have not perhaps attempted to solve the difficulties which they must meet in their daily work. From the letters received there are apparently, on the other hand, pharmacists who would be only too glad to receive suggestions for suitable

subjects requiring investigation and a little guidance in its conduct. The Research Sub-Committee would be happy to become the intermediary to these two sections, and would welcome suggestions for subjects to be included in the above-mentioned research-list and applications from members for suitable subjects for research. Communications on the subject may be addressed to Mr. H. Finnemore, Guy's Hospital, London, S.E.

North Staffordshire Chemists' Association. — The annual meeting was held on October 19 at the Roebuck Hotel, Stoke, Mr. E. M. Mellor (Uttoxeter) in the chair. There were also present Messrs. G. Cope (Leek), E. Corner (Hanley), J. A. Dale (Stoke), H. W. Oliver (Shrewsbury), G. Stockwin (York), W. H. Kemp (Fenton), Hon. Treasurer, and T. Bentley (Stoke), Hon. Secretary. The President (Mr. Weston Poole) was unable to be present owing to indisposition. The Hon. Secretary, in his annual report, reviewed the events of the year; and the Hon. Treasurer reported a credit balance of 4*l.* 10*s.*, against 4*l.* 13*s.* 1*d.* last year. The Chairman described the reports as very satisfactory, and said, in regard to the National Insurance Bill, chemists would certainly not have obtained the treatment they had received from the Government but for the fact that they were able to approach the Government as an organised body. He said Mr. Glyn-Jones had worked like a Trojan on behalf of chemists. The reports having been adopted, the Chairman, on behalf of the members, presented to Mr. Kemp a case of fruit-knives as a wedding-present, and Mr. Kemp replied. Officers were elected as follows: *President*, Mr. T. C. Cornwell; *Vice-Presidents*, Mr. W. D. Edge and Mr. Weston Poole; *Hon. Secretary*, Mr. T. Bentley; *Hon. Treasurer*, Mr. W. H. Kemp; *Committee*, Messrs. E. Joncs, W. Tipper, E. M. Mellor, J. A. Dale, and E. Griffiths, the officers being *ex-officio* members. At the close of the meeting Mr. Kemp raised the question whether commercial men were eligible for membership of the Association, and said he intended to bring up the matter at the next meeting.

Glamorgan Valleys Chemists' Association.—A meet- was held at the New Inn Hotel, Pontypridd, on Thursday evening, October 19, Mr. Daniel Arnott (Pontypridd) in the chair. Messrs. A. Hagon and F. Lean (Cardiff) were among those present. It was resolved to hold a whist-drive in November, arrangements being left in the hands of the Secretary (Mr. W. Oswal Davies), who also reported what he had done to get lectures or papers on trade subjects during the winter months. It was agreed to discuss business subjects at the December meeting, and the Secretary was instructed to take steps with the view of having a lecture delivered early in the New Year. Mr. Lewis (Mardy) initiated a discussion on wine-licences, in which Mr. Hagon and others took part, and it was decided to endeavour to get better consideration for chemists in their applications. It was agreed to issue a circular to the chemists in the district about the advantages of the Association. A communication was read from New Tredegar pointing out that Mr. Glyn-Jones is prepared to confer with the chemists of the Aberdare, Merthyr, Rhondda, and other colliery centres as to their position under the Insurance Bill on Thursday, November 2, at a time which would permit of his being back in the House of Commons by 10 P.M. The co-operation of the Association in securing a good attendance was asked for. After some remarks from Mr. Hagon, the Secretary was instructed to advise members about the meeting. Mr. Hagon then addressed the members on some of the issues affecting the trade which are involved in the Insurance Bill, explaining the alterations which had been made in Clause 14, which deals with the supply of medicines, whereby supervision of dispensing by qualified chemists is secured. He also dealt with other matters in the Bill. Subsequently he spoke of the Pharmaceutical Council's scheme of local organisation. In the discussion which followed it was pointed out that the trade should possess a very strong Association in industrial and commercial centres such as Merthyr, Pontypridd, Rhondda, and Aberdare. Mr. Hagon suggested that the Association should appoint gentlemen in the various centres to see members of the trade so as to secure their alliance. Reference was made to the desirability of the inclusion of the Welsh language in the Pharmaceutical Preliminary examination, and the fact should be specifically stated in all communications as to the examination sent out from the head office. A resolution to this effect was carried. An interesting meeting was concluded with a conversation on the care requisite in the sale of poisons.

Western Chemists' Association.—There was a smaller attendance than usual at the meeting held at the Restaurant Frascati, London, W., on October 25, only about thirty members being present to hear Mr. F. W. Crossley Holland, F.C.S., give a highly ethical contribution on "The Relation of Therapeutics and Pharmacy." The paucity of members present was no doubt partly due to the fact that the nature of the business had not been published. The chair was taken by Mr. W. Browne, and among the company were Messrs. C. T. Allen, J. T. Barrett, C. Brooks, A. Haigh, F. L. R. Loxley, J. D. Marshall, F. W. Naylor, H. R. Procter, N. H. Schollar, G. A. Tocher, S. C. G. Tweedy, R. L. Whigham, and the Hon. Secretaries (Messrs. R. E. Lownsbrough and A. Latreille). Votes of condolence were passed upstanding with the relatives of three deceased members, Messrs. Cooper, Shaw, and Woollons. Nine new members having been proposed and seconded, the Chairman called upon Mr. Crossley Holland to read his paper. In this the author pleaded that a closer acquaintance by pharmacists with therapeutics would lead to a closer union with physicians. The former should aid the latter in choosing the proper mode of exhibiting a drug and be ready to make good any of the physician's shortcomings. The medical man, Mr. Holland suggested, would look upon this assistance in the light of suggestion, and not of interference. Concrete examples of the type of knowledge required were given. These were: The administration of calomel in small doses during pregnancy of women; the forty or more preparations of the salicylic group could be divided into two classes, enabling one to confine the stock on the drug-shelves to one or two preparations. Dietetic methods of treatment were becoming of increasing importance; in typhoid fever free feeding with sterilised solid diet had replaced the starvation liquid dietary. The rate of the excretion of drugs and the amount excreted are now taken more and more as a guide to therapeutic activity. Dr. Munro determined the amount of iron in the fæces in order to measure the relative absorption of iron salts. Iodine is found to be more efficient physiologically in accordance with slower excretion. The pharmacist might extend the clinical side of his pharmacy and undertake the examination of excreta. It would be a good plan, the lecturer said in conclusion, for pharmacists to specialise on some particular subject, such as children's diseases, in accordance with the kind of medical practice in the neighbourhood. During the following discussion, taken part in by Messrs. Marshall, Allen, Barrett, Procter, Melhuish, and Browne, many compliments were made regarding the lecture, and shoals of questions of a therapeutical character were asked. Mr. Marshall mentioned that he had been asked to prepare sterilised food. Mr. Crossley Holland replied at length. A hearty vote of thanks to the lecturer ended the proceedings.

National Federation of Ophthalmic Opticians.

Of the nine societies affiliated to this Federation five were represented at the first annual meeting, held at the Albion Hotel, Manchester, on October 18.

There were morning and afternoon sessions for the transaction of business, followed by the reading of a paper on "Prisms in Practice," contributed by Mr. H. Harcourt Carter, Bridgetown, Barbados, an unattached member of the Federation. In the evening the first annual dinner of the Federation was held, attended by a fair number of the members of the Manchester and North of England Optical Society. Mr. J. C. Kidd, who is the President of that organisation, as well as of the Federation, occupied the chair at the several gatherings, and was supported by Mr. Thos. Aikenhead, President of the Scottish Optical Association; Mr. T. S. Baird, President of the Glasgow Optical Society; Mr. R. E. Heppell, Hon. Secretary Northern Counties Optical Society; Mr. A. Hershberg, Hon. Secretary and Treasurer of the Federation; Messrs. R. T. Forbes (Stockport) and C. W. Lloyd, Vice-Presidents of the Manchester Optical Society; and Mr. J. W. Oberlee, of the Manchester Branch of the National Association of Goldsmiths.

The Annual Report.—The Hon. Secretary, in his report, recorded the founding of the Liverpool Optical Society and the establishment of an insurance scheme for members. There are now on the register 267 sight-testing opticians. With regard to the insurance scheme, Mr. Hershberg said: "The Federation policy stands unequalled; firstly, because of the magnificent protection it gives the insured at a trifling cost; secondly, because no distinction is made between the certified and uncertified." Under the scheme a member for a premium of 12*s.* 6*d.* is insured against prosecution up to 1,000*l.* in any one case, with a total backing up to 10,000*l.* The report was adopted.

New Members.—The following were elected: Mr. C. Howard Bolland, of Mackay, North Queensland, Australia; Mr. A. Hingston, Haymarket, Sydney; Mr. C. W. Smith, 438 West Street, Durban, Natal; Mr. Cleave, Market Place, Pontefract; Mr. James Morris, of

Knowsley Street, Bolton; and Mr. J. J. Ramsbottom, Union Road, Oswaldtwistle, near Accrington.

Election of Officers.—After a short debate on the future of the Federation, Mr. Kidd was re-elected President and Mr. A. Hershberg was re-appointed Hon. Secretary and Treasurer. Mr. Thos. Aikenhead was appointed Vice-President.

Glasgow and West of Scotland Chemists' Association.

The opening meeting of the session was held in the Regent Tea Rooms, Glasgow, on October 19, Mr. James Lennox (President) in the chair.

Mr. Brodie, at the request of the Chairman, addressed a few words to the meeting, expressing the opinion that for chemists at the present time the motto should be "Unite." (Applause.)

The President sympathetically referred to the deaths of Mr. J. McMurray, Helensburgh, and Mr. Charles Kerr, Dundee.

Mr. J. H. Hart, the Hon. Secretary, submitted a list of forty-three new members obtained as the result of a special effort made to get the country chemists to join the Association. On the motion of the Chairman, seconded by Mr. Guthrie, the new members were elected.

Mr. Smith suggested that a committee be appointed to consider the question of bringing the assistants into the Association, and after remarks by other members the matter was referred to the Council, which at present is considering the probability of developing the prize scheme by perhaps offering something in the form of a bursary for a class or classes.

The Chairman then spoke of the work of the Association during the summer months, including the deputation to Scotch M.P.s *re* the Insurance Bill and the Pharmaceutical Classes at the Technical College. The Association had been asked to subscribe to the latter, but had declined. He proceeded to deliver his

Presidential Address,

the title of which was "Pharmacy: Whence and Whither?" It was an historical review of the evolution of British pharmacy. After mentioning the data, Mr. Lennox proceeded to say:

The growing development of company-trading alone had made them feel that if there was a calling where the development of individuality was absolutely essential, that calling was theirs. And then they had had the idealist to screw up the standard of education regardless of present conditions, who laid upon men's shoulders greater burdens than they could bear and would not lift one of his little fingers to help them. The idealist was responsible in large measure for the years of distress and anxiety occasioned by a decision of 1880 and the legislation of 1908. The idealist also was responsible for the raising of the standard of the Preliminary examination. He was responsible for the physical breakdown which many of their students experienced, of men earning their living and at the same time burning the student's midnight oil. A sane pessimism, Mr. Lennox said, was absolutely essential for dealing with the situation created by the introduction of the National Insurance Bill. He took it that they were all agreed that the greatest step forward that pharmacy could now make was to have legal recognition as the dispensers of the physicians' prescriptions in this country. This division of labour by physician and pharmacist was an accomplished fact in certain parts of the country with the best results all round. They in the West of Scotland could fully appreciate the great change which the passing of the Insurance Bill as now amended would bring. The pharmacists would have less need for "side-lines" than they had now. Under a system of national insurance there were undoubtedly pitfalls to be faced. Possibly a large amount of the trade might not go the way of the one-shop man, but if the standard of the Bill was persisted in—and he thought the Chancellor would retain 160*l.* a year as the limit, and not, as some parties wanted, 104*l.* a year—there was every likelihood that a great deal of money would come their way. The question of remuneration for work performed under the Insurance Bill was the first and greatest task they as an association of pharmacists would require to set their minds to.

In his closing remarks the President stated that in Glasgow and neighbourhood at present there are more assistants attending classes in the endeavour to pass the Preliminary examination than there are at classes learning the sciences in a systematic way for their life-work.

On the motion of Mr. J. P. Gilmour, Mr. Lennox was thanked for his address.

At next meeting, on November 16, the Association is to discuss the question of dispensing-charges under the National Insurance Bill.

Institute of Ophthalmic Opticians.

Dr. W. Ettles occupied the chair at a meeting of the Institute at the Holborn Restaurant, London, W.C., on October 25, when Dr. G. Lindsay Johnson delivered a lecture on

Discoveries in Connection with the Eye and Colour-photography.

Dr. Lindsay Johnson said that he is leaving for South Africa on November 3, where he intends to remain for two years. He took up photography as an aid to his eye-work, and had published two books on the subject, primarily as text-books for the Spectaclemakers' examinations. Referring to the autochrome and Dufay processes of colour-photography, he regretted that these could only be employed as transparencies, although he said a new paper process, only requiring fixation in benzol, is now being introduced. He called attention to the fact that lantern-slides made by the autochrome process exhibited an excellent stereoscopic effect when shown on the screen, an effect which cannot be obtained in the ordinary slides except by the employment of complex devices. The lecturer then spoke of the importance to opticians of being able to recognise a healthy eye, and, exhibiting an outline sketch of the eye, stated that he had discovered that the peripheral system of the eye is divided into sections, each of which exhibits a different microscopic structure. This he considered to be remains of the different coloured zones which, still found in animals, have been nearly obliterated by evolution. He pointed out that Nature in evolution produces changes in organs, but that the original stage is never quite obliterated. Examples of this are found in the vermiform appendix, the only use of which in man, he dryly suggested, is to fill the surgeon's pocket. Organs which have been lost appear as freaks, examples being the multiple nipples and gills sometimes found in the human body. The caruncle of the eye is the remains of the membrane nictitans, which grass-eating animals possess as an additional eye-lid to protect against injury from sharp spicules of grass. The ear muscles in man have become atrophied, but are of great use to animals as a warning of approaching danger, by erecting the ears an animal can catch danger-sounds more readily. Some coloured slides of the fundus of the eye were then projected on the screen, one being a remarkable example—the fundus of a Nubian youth with extraordinary vision. This youth could see the three Jupiter moons with the naked eye and read "The Times" ten feet away. Another slide showed another discovery of the lecturer—viz., that the rods of the retina are supported by little tags to keep the fibrils insulated from the rest. He has also discovered in the fovea of man a layer of tissue—the paramacula layer—but so far no use for this has been suggested. Dealing next with the macula lutea or yellow spot, Dr. Lindsay Johnson was led to inquire why this is yellow, and it was not till he took up colour-photography and speculated upon the employment of a yellow screen that it occurred to him that the yellow spot fulfils a similar function in the eye as does the screen in cutting down the blue and ultra-violet rays. There is, he explained, a kind of light filter over the fundus—a film which only allows one layer of blood-corpuscles to pass at a time—but this filter is absent at the yellow spot. He noted also that the yellow spot can only be seen in the eye after death. The lecturer mentioned that another discovery he has made is that the cones do actually reach the hexagonal layer, contrary to the text-books, which assert that only the rods do that. By fixing the eye in life and staining the cones with methyl blue, the axis fibre remained, and can be shown clearly to reach the hexagonal layer exactly as do the rods. The lecturer then dealt with some of the curiosities of animals' eyes, and showed that Nature corrects the enormous amount of astigmatism in the seal's eye by an iris that can be contracted in slit form at right-angles to the meridian of astigmatism. The seal can alter its pupils

at will, an abnormality occasionally, but very rarely, found in the human being. The female cat can look at the sun with impunity by reason of the fact that its eyes are provided with a special slit form of iris, the edges of which overlap slightly and cut off the light entirely. A circular iris could never exclude light so perfectly. The remains of the pecten of animals' eyes are occasionally found in the human eye, and have been mistaken for remains of the hyaloid artery. The eyes of birds have no blood-vessels in the retina, the pecten supplying the nourishment required. The horse's eye shows a peculiar black curtain in the upper and lower part called the corpus nigrum, and by following this through lower animals Dr. Lindsay Johnson was able to show that it is the remains of interdigitate prominences which enable animals after closing them to look at the sun with impunity. Dealing then with Lumiere photographs, the lecturer said it puzzled him as to why a pure white is obtainable in autochrome plates. When a stripped plate is observed the colour is not white, but greyish-pink. As far as the research has gone, the lecturer is led to believe that the purity of the white is due to a deposit of black metallic silver on the grains, but why black added to grey makes it white is a problem still unsolved.

The Obligations of Sight-testing Opticians.

Dr. Lindsay Johnson then gave a lecturette on the limitations of the optician, and began by paying a tribute to Mr. L. Laurence as having taught him all the visual optics he knew. The lecturer said he is entirely in favour of opticians doing refraction work up to a certain point. For one reason there are only about 500 oculists and about 1,000 medical men with a knowledge of optics to attend to the wants of 43 millions of people, half of whom at some time in their life require visual aids. It must also be remembered that opticians have been fitting spectacles for 600 to 700 years, while oculists have only been in existence a tenth of that time. He, however, objected to opticians overstepping the line of health. As soon as an eye is found not to respond to the tests of a healthy eye, the patient should be handed over to the oculist. A healthy eye he defined as one in which the vision can be made normal with glasses, in which there is absence of pain, redness, lacrymation, and photophobia, and where the pupils respond to light and the eye possesses all the movements. The optician should not diagnose the disease, but merely tell the patient that "he should have further advice." If the patient with diseased eyes is fitted with glasses, he is sure to blame the glasses when the disease develops, but if warned by the optician no blame will rest with the latter. There are four diseases which the optician should recognise, because aggravation of the disease results from the use of glasses, and again if these diseases are detected in time palliative treatment can be adopted. These diseases are (1) glaucoma, (2) sympathetic ophthalmia, (3) iritis, (4) conical cornea. In the case of conical cornea the oculist can do nothing to cure the disease, but the optician may step in afterwards and fit stenopaic glasses. An excellent maxim for the optician is, "When in doubt do nothing." "Remember," said Dr. Lindsay Johnson, "it is not your business to diagnose disease. Medical men, like other people, are jealous, and often pig-headed to other people who invade their province."

After votes of thanks had been given to the lecturer, an inspection was made of a large number of autochrome photographs.

Liverpool Chemists' Association.

A Meeting was held at the Royal Institution, Colquitt Street, on October 19, the President (Mr. G. V. C. Last) in the chair. There were also present Dr. Symes, Messrs. A. C. Abraham, T. F. Abraham, J. F. Abraham, H. Humphreys Jones, E. Prebble, G. H. Moffat, J. E. Whittaker, Prosper H. Marsden, Harold Wyatt, B. Whalley, J. Haddock, T. Ashworth, L. Moreton Parry, Anthony S. Buck, and G. H. Cole.

Mr. Harold Wyatt announced that Mr. Harry Martin had given to the Association a copy of Kraemer's "Botany and Pharmacognosy," for which Mr. Martin was accorded a vote of thanks.

Urotropin and Sugar.

Dr. Symes drew attention to some powders he had been called upon to dispense, containing urotropin with sugar. In a few hours these powders went quite moist, and after keeping for two days went into a paste. He had overcome the difficulty by using sugar of milk in place of cane sugar.

Election of President.

Mr. G. V. C. Last was then re-elected President, upon the proposal of Mr. Wyatt, seconded by Mr. T. F. Abraham.

Notes on the Recent British Pharmaceutical Conference Papers.

Mr. A. C. Abraham, Ph.C., F.I.C., submitted some observations on the papers communicated to the British Pharmaceutical Conference meeting at Portsmouth, from which we extract the following notes:

Assay of Opium and Its Preparations (Farr and Wright).—Mr. Abraham is absolutely convinced that the proper way to make tincture of opium is to dry the opium, reduce it to a 20 powder, macerate it in a portion of the spirit, and percolate with the remainder. Experiments show that the marc does not contain any appreciable amount of morphine. The discussion upon this paper showed a considerable diversity of opinion upon this point, and it would be very interesting to know whether those who believe that in making a tincture a loss of morphine occurs do follow the Pharmacopœia process or not. There is ample room for discrepancies in the estimation in more than one respect. The Pharmacopœia process is based upon Michael Conroy's. Several writers have gone to very great pains and made very elaborate calculations to show that the aliquot proportion of the filtrate which Conroy recommended should be taken to represent 100 parts of the opium (which has been exactly followed by the B.P.) is wrong, but they do not seem ever to have tried a very simple method which would have proved whether the figure is right or wrong. Now, if 140 c.c. of water is added to 14 grams of dry opium and the hydrate of calcium is added, it is evident that 100 c.c. *of the water* must represent 10 grams of the opium, and therefore the 104 c.c. which is ordered to be taken should contain 100 grams of water. To show that this figure is correct Mr. Abraham evaporated a proportion of this liquid since, and found that 104.4 c.c. would have actually contained 100 grams of water, showing that for that sample of opium at least Conroy's figure and that of the B.P. are practically correct, although not absolutely so if a moist opium is used. A fertile source of error arises from the evaporation of the ether on the outer of the two filter-papers directed to be employed, and to avoid this Mr. Abraham employs three papers, so that any narcotine and other matters dissolved in the ether may dry on a filter-paper which may be rejected and not vitiate the result. Also *after drying*, thoroughly wash both the counterpoised filters and the morphine with more ether, laying them for this purpose flat upon filter-papers or a porous tile to take up anything which may be removed.

Extract of Indian Hemp (Harold Deane).—In this paper two fundamental facts appear to have been overlooked—viz. (1) That the extract has no right to be green, and is only of this colour if it has been made in copper vessels. It is not, however, entirely free from an olive-green colour, which becomes evident when it is dissolved. (2) That the matter insoluble in alcohol is formed by keeping and exposure to the air. It is to be feared that the habit of employing a green extract of Indian hemp has become so universal that it would be impossible to get pharmacists to believe that they were getting the correct thing unless it were green. Mr. Abraham exhibited a sample made in a nickel vessel *in vacuo*, which showed no green colour and was almost entirely soluble in spirit. Mr. Abraham criticised other points in the paper and commented generally upon the readiness with which some extracts take up copper, and calling attention to the fact that the United States Pharmacopœia very properly orders this extract to be evaporated in a porcelain capsule. The extraordinary rapidity with which some resinous bodies act upon copper is indeed remarkable, and in this connection he mentioned that both pills of Viburnum prunifolium and extract of Hydrastis canadensis act so rapidly if rolled on a hot copper plate that they will impart a green coloration to the coating if afterwards coated with gelatin. It is a very interesting and important point for consideration as to how far the medicinal properties of extracts are affected by their manufacture in such a way that they take up such relatively large proportions of copper, and it seems highly inconsistent that chemicals should be rejected by the Pharmacopœia

because they contain infinitesimal quantities of arsenic or lead, while medicinal extracts are frequently found containing such relatively large amounts of copper. In this connection Mr. Abraham showed a solution of copper obtained from 4 oz. of extract of Fucus vesiculosus, and stated that his daughter found the copper to amount to 0.064 per cent. of the extract.

Spirit of Sal Volatile (E. W. Pollard).—Mr. Abraham agreed that the collection and employment of the last portions of the distillate are both unnecessary and objectionable.

Thyroideum Siccum (R. R. Bennett).—The statement that the percentage of iodine in thyroid glands is so much higher in the winter months is of great interest and importance, and the following fact seems to have special interest and to be very suggestive. Mr. Abraham obtained a batch of glands unusually large in size, and on inquiry found that the sheep from which they had been taken had come from Iceland (which is a rare occurrence). At that time medical men based their dose of thyroid upon a fraction of a gland, and as a quarter of one of these glands must have produced quite as much powder as a whole gland from an English sheep, it occurred to Mr. Abraham whether their strength was in proportion to their size.

Mr. Harold Wyatt thought the comments very fair. With regard to the greenness of extract of Indian hemp he considered that it was frequently due to the age of the specimen, and also in no small measure to the length of time taken in preparing it, as evaporation in the presence of moisture tended to cause the formation of brown water-soluble resin, as pointed out by Deane. He was informed by a medical man who had lived for some time in India that an extract was made in that country by a process of prolonged boiling in an open vessel, and that this caused the resin to change its properties and become less intoxicating in its effects. He considered that a very small amount of copper in the extract would give a good colour, and it is very likely that the chlorophyll of the drug would extract the copper in addition to the acidity of the resin which had been mentioned. The green colour of the extract is considered necessary in making corn paint, and in view of the high price of cannabis indica extract he had been in the habit of making his own corn paint without the extract at all, and colouring it with chlorophyll. Mr. Wyatt mentioned that many years ago, before the introduction of local anæsthetics, a dental friend informed him that the best local anæsthetic before extraction of teeth was tincture of Indian hemp painted upon the gum. In regard to Farr and Wright's paper he had always made tincture of opium with hot-water digestion, and his father always insisted that the opium should be simmered for at least a quarter of an hour, as he did not agree with the process of percolation for a drug like opium. He (Mr. Wyatt) preferred Mr. Conroy's process for the assay of opium; it gives accurate results.

Mr. Marsden referred to the practical nature of the Conference papers and called attention to the varying amounts of morphine in different commercial samples of opium. He had found the greatest uniformity of morphine-content in the kind known as "Druggists' Sorts," although the amount of moisture was often considerable. Mr. Marsden had recently made some extract of Indian hemp in which the colour changed from green to brown during the process. He commended the use of nickel basins in place of copper for making galenical preparations. The only preparation that acts upon nickel to any extent is ferri et quininæ citras.

Dr. Symes said that from the days of his apprenticeship he had been in the habit of making tincture of opium by the process of digestion and maceration, and always took a pride in the preparation which was a good tincture, which, although not always assayed, was found to be uniform in morphine-content whenever tested. He had not found any difficulty in obtaining a gluten flour containing as low as 3, 4, or 5 per cent. of starch, but he understood that in order to make a palatable preparation it is necessary to have a certain amount of starch.

The vote of thanks was then carried by acclamation. Mr. A. C. Abraham replied.

German Chemicals.—The Union Chemical-works of Stettin manufactured during 1910 245,185 metric tons of various products, against 218,612 metric tons in 1909. The net profits were 136,482*l.*, and a dividend of 25 per cent. was paid.

FESTIVITIES.

A Social in Grimsby.

The chemists of Grimsby and district held their first social gathering of the season at Dring's Hotel, Grimsby, on Thursday, October 19, when an enjoyable evening was spent. In the absence of the President, the Vice-President (Mr. Sneath) welcomed the guests, expressing the hope that such meetings would more and more rub off the sharp edges of business jealousy and unite them as one happy family. The programme arranged by the Secretary (Mr. C. H. Ashton) included a billiard tournament, and some very interesting games were witnessed, Mr. H. Schofield being the winner.

Bournemouth Dinner.

The annual dinner of the Bournemouth Pharmaceutical Association was held at the Gervis Hall on October 18, when Mr. F. W. Hornby presided over a large attendance. The company included Alderman J. E. Beale (Deputy-Mayor), Dr. A. C. Coles (President of the Bournemouth Medical Society), Dr. P. W. G. Nunn, Dr. W. J. Midelton, Dr. F. W. Ramsay, Dr. A. H. Vernon, Dr. H. D. Coles, Dr. W. H. Fawcett, Dr. C. P. Woodstock, Messrs. F. J. Tanner, W. A. Bingham (Hon. Secretary to the Association), J. H. Scampton, G. Knight (President Bournemouth Drapers' Association), J. R. Edgecombe (President Bournemouth Grocers' Association), H. Dyer (President Bournemouth Builders' Association), Charles Umney, F.I.C., F. E. Bilson, Francis Rose, A. E. Ball, J. A. Haynes, A. Worth, C. F. R. Pars, T. Hirst, C. J. Reid, W. B. Botham, T. Boyle, A. Akhurst, A. E. Loder, A. Ayre (Poole), H. Lewis (Poole), G. H. Osmond, A. E. Knill, W. E. Curtis, F. A. Graham, J. H. Gothard, A. T. Tyler (Parke, Davis & Co.), E. J. Allen (The British Drug Houses), W. E. Cooper (Reuter's), S. H. Carr (Sangers), F. A. Seymour (Allen & Hanbury). H. Brown (Evans & Co.). Following the loyal toasts, Mr. Francis Rose gave the toast of "The County Borough of Bournemouth," which was acknowledged by the Deputy-Mayor and Dr. P. W. G. Nunn, consulting medical officer of health. Mr. Charles Umney then submitted the toast of "The Pharmaceutical Society," recalling the fact that forty-eight years ago he won a Bell scholarship and received his first instruction in chemistry in the Society's laboratories. Regarding the Insurance Bill, he said he thought pharmacists were lucky in having the member for Stepney in the House of Commons. Mr. Bilson, in responding, referred to the deputation which waited on the Chancellor of the Exchequer to urge the six points representing the minimum claim of pharmacists, and chemists were most fortunate in their Parliamentary Secretary, who had served them excellently. Mr. Bilson also spoke of the Benevolent Fund. Mr. Curtis proposed the toast of "The Medical Profession," which Dr. A. C. Coles acknowledged. Dr. Midelton then proposed the toast of "The Bournemouth Pharmaceutical Association," and Mr. F. W. Hornby, in responding, spoke of the loss sustained during the year by the death of Alderman G. E. Bridge, and to the honour which had been done to the Association by the election of one of its members to the Council of the Pharmaceutical Society. The toast of "Kindred Associations" was afterwards honoured.

Nottingham Chemists Dine.

The annual dinner of the Nottingham Pharmaceutical Association was held at the Victoria Hotel, Nottingham, on October 19, when Mr. C. B. Allen, the President of the Pharmaceutical Society, was the principal guest of the evening. There was a representative gathering of local chemists present to welcome him. Alderman R. Fitzhugh occupied the chair, with Mr. Allen on his right and the Lord Mayor on his left. Mr. W. Burnage proposed the toast of "The Pharmaceutical Society," and our artist has caught him in a characteristic attitude.



Mr. W. Burnage Toasts "The Pharmaceutical Society."

Mr. C. B. Allen, in replying, described the National Insurance Bill as an Ishmael-like doctrine whose hand is against everyone, and everyone's hand is against it. When he introduced the Bill, Mr. Lloyd George said he wanted to separate dispensing for the sick poor from purely medical practice. That seemed a nice sentiment, and the Pharmaceutical Society thought it was a very good thing, but the Society had soon to be on the alert. When the Bill was disclosed there was no phraseology of any kind which protected chemists in the slightest degree. After

some argument the words "properly qualified individuals" were inserted, but it was pointed out that that meant nothing at all, for anybody might be called a properly qualified individual. It was some considerable time before Mr. Lloyd



Mr. C. B. Allen talks about the National Insurance Bill. Alderman Fitzhugh and the Lord Mayor are to Mr. Allen's left.

George was brought to see that the only way to secure the conditions desired was to use the register of the Pharmaceutical Society as a basis. In fact, it was only at the very last moment that the clause was altered. Mr. Allen also mentioned that he had written to the Chancellor of the Exchequer, and the latter had replied that he did not think there would be any discussion which would affect pharmacists, but should anything arise he had promised to call Mr. Glyn-Jones into their conferences. (Applause.)

Other toasts followed, and a pleasant evening was spent.

COMING EVENTS.

This section of the "C. & D." is reserved for advance notices of meetings or other events which are sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Wednesday, November 1.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, London, W.C., at 11 A.M. Council-meeting.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin, at 3 P.M. Council-meeting.

Thursday, November 2.

Chemical Society, Burlington House, London, W., at 8.30 P.M. Among the papers to be communicated are the following: "The Constituents of the Seeds of *Casimiroa edulis*," by Dr. F. B. Power and Mr. T. Callan; "Preparation of the Betaine of Tryptophan and its Identity with the Alkaloid Hypaphorine," by Mr. P. von Romburgh and Dr. G. Barger; "*β*-2-methoxynaphthylpropionic Acid and Methoxy-*peri*-naphthindanone," by Dr. G. Barger and Mr. W. W. Starling; "Dihydroxydihydrindylamine and its Resolution into Optically Active Components," by Dr. W. J. Pope and Mr. J. Read.

Great Yarmouth Pharmaceutical Association, 156 King Street, at 8 P.M. Monthly meeting.

Liverpool Chemists' Association and Birkenhead and Wirral Chemists' Association, Bear's Paw Restaurant, Liverpool, at 8 P.M. Joint smoking-concert, Sir Edward Evans in the chair.

Chemists' Assistants' Association, 73 Newman Street, Oxford Street, London, W., at 9 P.M. Social evening.

Monmouth Valleys Pharmaceutical Association, Assembly Rooms, Newport, at 3.30 P.M. Private Conference with Mr. W. S. Glyn-Jones, M.P., with special reference to chemists in colliery districts. All local chemists are invited to attend.

Friday, November 3.

Dundee Chemists' Assistants' and Apprentices' Association, Mather's Hotel, at 9.15 P.M. Mr. A. Butchart on "Some Adulterants of Food and Drink."

Salford Pharmacists' Association.—Annual dinner at the Cattle Market Hotel, Cross Lane, on November 15, at 6.45 P.M. Tickets (4*s.* each) from Mr. C. B. Brown, Ph.C., Victoria Bridge, Manchester, or any member of the committee.

Pharmaceutical Society of Great Britain.—The first evening meeting of the session will be held at 17 Bloomsbury Square, London, W.C., on November 7. Mr. R. Glode Guyer, Ph.C., will read a paper entitled "Some Observations on the Official Ointments."—The opening lecture on November 24 of the North British Branch in Edinburgh will be by Dr. Ellis, Lecturer on Botany at the Glasgow and West of Scotland Technical College, on "Bacteriology in Relation to the Work of Pharmaceutical Chemists."

TRADE-MARKS.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for £1) and lodged with Mr. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(*From the "Trade-marks Journal," October 4, 1911.*)

"Industria" and device of bee in circle; for surgical belts (11). By J. B. Brooks & Co., Ltd., Great Charles Street, Birmingham. 334,545.

"Velvet Gloss"; for edible gelatin (42). By W. J. Bush & Co., Ltd., Ash Grove, Hackney, London, N.E. 334,855.

"Homestead"; for egg, custard, and baking powders (42). By J. V. Roberts, 27 and 28 King William Street, London, E.C. 334,900.

"Tru Food" and scroll device; for food-substances (42). By Trufood, Ltd., 4 Lloyd's Avenue, London, E.C. 335,392.

"Pedigree," for cattle-food (42); "Congola" and "Waxaw," for various goods (47); "Lux," for perfumery, etc. (48). By Lever Brothers, Ltd., Port Sunlight, Cheshire. 335,199, 334,931, 335,974, 335,237.

"Homalt"; for preparations of honey and malt (42). By Yenoh Honey Co., Ltd., London Road, Worcester. 335,626.

"Lynrockaris (or Sparkling Lynrock)"; for natural mineral-water (44). By Lynrock Natural Mineral-water Syndicate, Ltd., 5 Abchurch Yard, London, E.C. 334,501.

"Finna"; for hair-brushes, etc. (50). By Mason Pearson, 4-7 Royal Victor Place, Old Ford Road, London, S.E. 335,964.

(*From the "Trade-marks Journal," October 11, 1911.*)

Circular label device; for iron chloride and potassium permanganate (2). By Fahlberg, List & Co., Schonebeckerstrasse 3, Salbke, Westerhusen. 332,890.

Label device including letters "R. L. Co." entwined; for all goods (2, 3, 4, 47, and 48). By R. Lehmann & Co., Ltd., Peninsular House, Monument Street, London, E.C. 335,854/5/6/7/8.

"Celtol"; for an antiseptic fluid (2). By J. Gold Robertson, Pollokshaws Road, Crosshill, Glasgow. 335,934.

"Aldofurm"; for all goods (3). By J. A. Wulfing, 231 Friedrichstrasse, Berlin. 334,871.

Facsimile signature, "Pierre Rosenthal"; for medicinal chemicals (3). By P. Rosenthal, 13bis Rue des Mathurins, Paris. 335,344.

Label device in German; for Angier's Emulsion (3). By Angier Chemical Co., Ltd., 86 Clerkenwell Road, London, E.C. 336,184.

"Melbovin"; for a medicated food (3). By Melbourne Extract Co., Ltd., 45 Thomas Street, Liverpool. 335,892.

"Sesqui-t-c"; for essential oils (42). By A. Whittaker, 793 Oldham Road, Newton Heath, Manchester. 335,205.

Label device for "Liebig's Extract of Meat" (42). By Coleman & Co., Ltd., Wincarnis Works, Norwich. 335,305.

"Superol"; for all goods (42). By A. J. Murphy, 19 Dorrington Street, Leeds. 335,701.

"Numol"; for a food (42). By H. Chapman, 138 Hainton Avenue, Grimsby. 335,882.

Label device including words "Trufruit Extract"; for alcoholic fruit-extracts (43). By A. Boake, Roberts & Co., Ltd., 100 Carpenter's Road, Stratford, E. 335,461.

"Electric"; for a cloth-cleaning preparation (47). By A. Senier & Co., 195 Seven Sisters Road, London, N. 335,518.

TRADE REPORT.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, London, E.C., October 26.

A FAIR amount of activity is shown in the chemical and drug markets, with prices, as will be seen from our table, moving strongly in favour of sellers. Generally speaking, where values are unaltered, the undertone is firm. Among fine chemicals a further substantial advance is announced in santonin on account of the increased demand. Cocaine is steady, and morphine dearer. Pilocarpine may advance. Menthol continues its upward career, the present position being unique in its history. The trouble in China is now having a more marked effect on produce, as buyers are becoming uneasy in regard to future supplies from this important centre. This accounts for considerably more activity in rhubarb, star anise, cassia and wood oils. Other changes in drugs include cheaper prices for valerian, euphorbia, and chamomiles. Copaiba is firmer. In heavy chemicals a fair all-round business is passing at the various centres at generally full values. The changes include an advance in sal ammoniac and a firmer tendency in alumina products. Alum is to be advanced 2*s.* 6*d.* per ton from November 1; oxalic acid for 1912 delivery is also slightly higher; arsenic has a downward tendency, and copper sulphate is 5*s.* higher.

Higher	Firmer	Easier	Lower
Albumen	Alumina products	Arsenic	Chamomiles
Anise oil (star)	Ammonia sulphate	Bergamot oil	Cloves
Cassia oil	Capsicums	Cod-liver oil	Euphorbia pil.
Copper sulphate	Copaiba	Jalap	Valerian
Isinglass	Pimento	Lemon oil	
Menthol	Rhubarb	Manna	
Morphine		Orange oil	
Peppermint oil (Jap.)			
Santonin			
Vanilla			

Cablegram.

NEW YORK.—Business is quiet. Opium is steady at $8 per lb. for druggists'. Peppermint oil in tins is cheaper at $2.90. Tolu balsam is firm at 50c., and cascara sagrada is steady at 9c. Jalap is easier at 43c. Hydrastis is steady at $5.25. Ipecacuanha is firm at $2.25 for Cartagena. Guarana is quiet at $1.70 and Curaçao aloes is lower at 7¼c.

London Markets.

ACONITE.—Spanish (new crop) is quoted at 44*s.* c.i.f. for *napellus*.

ALBUMEN (EGG) is from 1*d.* to 2*d.* per lb. higher, the quotation for Chinese chicken being from 1*s.* 7½*d.* to 1*s.* 9*d.*

ALUM.—Owing to the increased cost of manufacturing, the makers notify an advance of 2*s.* 6*d.* per ton from November 1. Present prices are 6*l.* per ton for lump and 6*l.* 10*s.* for ground in ton quantities, less quantity being 5*s.* extra.

AMERICAN DRUGS.—The following are current quotations of a few of the more important barks, herbs, leaves, and roots on c.i.f. terms to arrive, unless otherwise stated: *Barks*, bayberry, 28*s.* per cwt.; black haw of root, 1*s.* per lb.; elm, 4¾*d.* per lb.; euonymus, 1*s.* 11*d.*; sassafras, 8*d.*; wahoo, 1*s.* 11*d.*; wild cherry, 4*d.* per lb. net on the spot; witch hazel, 3*d.* per lb. *Herbs*, lobelia, 4½*d.*; scullcap, 1*s.* *Leaves*, damiana, 8*d.* net on the spot; witch hazel, 3*d.* *Roots*, burdock, 6*d.*; elecampane, 6*d.*; gelsemium, 3¼*d.*; culvers, 6½*d.*; mandrake, 30*s.*; blood, 4½*d.*; and serpentary, 4*d.* per lb.

AMMONIA PRODUCTS.—A general all-round advance, which is likely to be permanent, has taken place in ammonia products, including *Liquor ammoniæ*. *Ammon. chloride* is 1*l.* per ton dearer, at 43*l.* per ton for firsts and 41*l.* for seconds in lump.

ANISE OIL, STAR.—Our last report closed with 6*s.* asked for oil on the spot, and this price (also 5*s.* 9*d.*) has since been paid, but the figure is now nominal. For arrival a good business has recently been done, the sales including October-November at 4*s.* 9½*d.*, November-December shipment at 4*s.* 10½*d.* c.i.f., October-December and December-January shipment at 4*s.* 11*d.* to 4*s.* 11½*d.* c.i.f. *Latest*: 5*s.* 10½*d.* will buy a little on the spot, and near-at-hand is quoted at 5*s.* 2*d.*

ANISEED is firm at 30*s.* 6*d.* per cwt. for fair Russian and 36*s.* for Spanish on the spot, the latter offering at 33*s.* c.i.f.

ASAFETIDA.—A good quantity of the low and middling qualities has recently been sold for export at from 50*s.* to 6*l.* 10*s.* per cwt., and the market is steadier in consequence; nothing is now obtainable under 80*s.* for common.

BALSAM CANADA in tins in cases is quoted at 2*s.* 6*d.* per lb. net on the spot.

BALSAM TOLU.—For large tins 2*s.* 3*d.* per lb. has been paid, being an advance of 3*d.*

BELLADONNA-ROOT, testing about 0.56 per cent. alkaloids, is offered at 35*s.* per cwt. c.i.f. for at least half-ton lots.

BERGAMOT OIL is a trifle easier for prompt shipment, old crop offering at 21*s.* c.i.f., and for new 20*s.* 10*d.* to 21*s.* c.i.f. is quoted for January-March shipment.

BUCHU is quiet, with a small business in round leaf at steady rates. Genuine longs continue scarce and wanted, and ovals are nominal at from 1*s.* 8*d.* to 1*s.* 11*d.*, as to quality. The *Armadale Castle* has brought 15 packages, the bulk of which are for New York.

The exports from the Union of South Africa during August 1911 amounted to 18,967 lb., valued at 2,748*l.*, against 23,573 lb., valued at 2,631*l.*, during August 1910. For the eight months ending August 1911 the shipments amount to 177,617 lb. (25,616*l.*), against 222,859 lb. (19,602*l.*) in 1910, or 45,242 lb. less.

CAMPHOR (CRUDE).—Small sales of China have been made at 155*s.* per cwt. on the spot.

CAMPHOR (REFINED).—Japanese is unchanged, the sales including 100 cases 2½-lb. slabs at 1*s.* 6¼*d.* per lb. c.i.f. Continent, for November-December and January-February shipment.

CANARY-SEED is in only moderate request, but the quotation is unchanged at 46*s.* per quarter for Turkish and 48*s.* for good Morocco.

CANTHARIDES.—At auction last week seven cases of Chinese sold at 1*s.* 2*d.* per lb., being steady. New crop Russian, which continues in small supply, offers at 2*s.* 10¾*d.* per lb. c.i.f.

CAPSICUMS.—At auction 488 bags Nyasaland offered, and 412 sold at higher rates, including fair to good bright red at 48*s.* to 55*s.*, mixed yellowish at 44*s.* to 47*s.*, and part perished at 37*s.* to 42*s.*

CARAWAY-SEED is quiet at 26*s.* to 28*s.* per cwt. for common to good Dutch.

CASCARA SAGRADA.—Steady. For four-year-old 42*s.* 6*d.* on the spot is quoted, and to arrive 41*s.* c.i.f. for new.

CASSIA OIL is from 3*d.* to 4*d.* per lb. higher, and importers are now firm at the following rates: 70 to 75 per cent. c.a., 3*s.* 6*d.*; 75 to 80 per cent., 3*s.* 8*d.*; and 80 to

85 per cent., 3*s.* 10*d.* per lb. c.i.f.; to arrive business was done prior to the advance at 3*s* 5*d.* c.i.f. for 80 to 85 per cent. for October-November shipment. On the spot 3*s.* 9*d.* to 3*s.* 11*d.* has been paid for 80 to 85 per cent. market closing at the higher figure.

Chamomiles are offered at the cheaper rates of 135*s.* c.i.f. for fair new, and at from 100*s.* to 105*s.* c.i.f., latter price for good seconds.

Cinchona.—The auction to be held at Amsterdam on November 2 will consist of 10,733 packages, comprising 9,064 packages Ledgeriana and hybrid, 735 cases and 934 bales Succirubra. The total weight is 941,911 kilos., containing the equivalent of 59,267 kilos. quinine in the bark. Of this, 828,205 kilos. is manufacturing bark and contains 55,297 kilos q.s., the remaining 113,706 kilos., representing 3,970 kilos. quinine, being pharmaceutical bark. The average percentage of quinine in the manufacturing bark is 6.68. The first-hand stock at Amsterdam on October 12 (including the above declarations) amounted to 23,832 packages, consisting of 4,847 packages Government and 18,985 packages private bark.

Citric Acid remains firm, English offering at 1*s.* 5*d.* and foreign at 1*s.* 4⅞*d.* to 1*s.* 5*d.*, while for next year's delivery foreign is quoted very firm at 1*s.* 5*d.*

Cloves.—At auction 170 bales Zanzibar sold without reserve at from 6⅞*d.* to 7*d.* for fair, and 6¾*d.* for dull, being easier; fair to good Penang (9 cases) were bought in at 1*s.* to 1*s.* 2*d.* Privately Zanzibar on the spot are offered at 7*d.* to 7½*d.*; to arrive the sales include August-October at 5⅛*d.*, November-January at 5*d.*, January-March at 5$\frac{1}{32}$*d.* Arrival market closes lower.

Coca-leaves.—At Amsterdam on November 2, 810 packages Java will be offered, weighing 43,350 kilos., containing 629 kilos. total alkaloids, or an average of 1.47 per cent.

Cocaine.—A rumour is current that a combination among the exporters of crude is on foot. Meanwhile the market for hydrochloride remains firm at the unchanged rate of 8*s.* 9*d.* and 8*s.* 3*d.* to 8*s.* 5*d.* in second-hands.

Cod-liver Oil.—Several dealers report more demand, with prices generally in favour of buyers; on the spot 115*s.* to 116*s.* per barrel will readily buy finest non-congealing oil, and on c.i.f. terms from 112*s.* to 114*s.* c.i.f. is quoted. Buyers are now taking up their forward contracts more freely, pointing to a better consuming demand. Our Bergen correspondent writes on October 23 that the market has an easier tone, and the quotation for finest non-congealing oil is 113*s.* 6*d.* per barrel c.i.f. terms.

Copaiba is rather firmer at 1*s.* 11*d.* per lb. c.i.f. to arrive for Maracaibo, and 1*s.* 11*d.* spot.

Copper Sulphate has advanced 5*s.* per ton to 19*l.* 15*s.* for ordinary Liverpool brands for prompt delivery, and to 20*l.* 5*s.* for spring.

Coriander-seed.—Morocco is steady at 15*s.* 6*d.* per cwt. Russian is quoted 22*s.* 6*d.* per cwt. c.i.f. terms for new crop.

Cream of Tartar is very steady, and although little fresh business is being done, dealers report that fair quantities are being called off contract; for 98-per-cent. powder 88*s.*, and 95-per-cent. 86*s.* per cwt. is quoted.

Cumin-seed is unchanged at 24*s.* to 25*s.* per cwt. for ordinary to fair Morocco. The quotation for Malta is 27*s.* c.i.f. terms.

Dragon's Blood.—The *Ajax*, from Singapore, has brought 16 cases.

Elemi.—Stocks at primary sources and in the principal markets are small, and prices tend firmer at from 52*s.* 6*d.* to 55*s.* per cwt. c.i.f., according to colour.

Ergot remains very firm, with Spanish offering on the spot at 5*s.* 3*d.*, and nothing obtainable from Spain, except for small quantities in second-hands at 5*s.* c.i.f. The spot market is bare of Russian, and from Hamburg equal to 4*s.* 9*d.* is asked for late shipment, few offers being obtainable direct from Russia. Several parcels have arrived from the Continent, also 25 packages direct from Vigo.

A Hamburg dealer in his circular reports: "This season's crop of Spanish has apparently all gone into channels of consumption; while offers from Russia for forward shipment are limited, high, and more or less speculative. The exorbitant prices still ruling have stimulated collection in Germany, and the equivalent of 4*s.* 6*d.* per lb. net, prompt cash, is now being paid for the comparatively small lots reaching our market from the Interior."

Eucalyptus Oil.—Importers find it increasingly difficult to obtain offers from Australia, this pointing to a general scarcity; 1*s.* 3*d.* to 1*s.* 4*d.* spot is quoted for B.P. qualities, and for *globulus* 1*s.* 6*d.* has been paid. The *Ascanius* has brought 79 cases from Melbourne, but these are for delivery against contracts sold to large consumers.

Euphorbia Pilulifera.—New is cheaper at 57*s.* 6*d.* per cwt., c.i.f. terms, for at least 5-cwt. lots.

Fennel-seed.—Levant of good green quality is offered at 32*s.* per cwt. c.i.f. On the spot sales have been made at from 22*s.* 6*d.* to 23*s.* 6*d.* net for Levant.

Fenugreek-seed is steady, with small sales of Morocco at 10*s.* 6*d.* per cwt.

Ginger.—Steady; at auction 324 bags washed rough Cochin offered, and 165 sold at 44*s.* 6*d.* to 45*s.*, and slightly wormy at 44*s.* 6*d.*; recently a good business has been done privately in Cochin ginger at higher rates.

Glycerin.—From the paragraph given below it will be seen prices have again declined in Paris for crude and dynamite qualities. Meanwhile the quotation for chemically pure remains unchanged, but is nominal 109*l.* per ton in cases and 105*l.* in drums for five-ton lots.

Advices from Marseilles state that prices have yielded further, saponification qualities in Paris having been lowered to 165f., and glycerin from the lye (80 per cent.) to 132.50f. Business was even put through at less—viz., 160f., 158f., and 155f. for the first named, and 127.50f. for glycerin from the lye for November-December delivery. It is, however, generally inferred that the sellers will, in consequence of the more active demand for late delivery (1912 and 1913), hardly see their way to dispose of their surplus of this year at further concessions. This likewise accounts for the more restricted offers which have been reported the last few days. Several hundred tons of glycerin from the lye (80 per cent.) were absorbed by European refineries for delivery over 1912 at 127.50f. and 125f. For contracts over 1913 there is but little disposition to negotiate orders, although some business has transpired in glycerin from the lye (80 per cent.) at 120f. to 115f. and even 110f. The quantities referred to, however, were too small to influence the general market situation. For unpacked glycerin per 100 kilos., in buyers' casks, to suitable European ports, for quantities of at least 1,000 kilos. (in one bottom), quotations are called as follows: Saponification glycerin (not under 88 per cent.), 160f. to 157.50f. for spot and delivery November-December 1911; for delivery 1912, 157.50f.; 1913, 155f.; glycerin from the lye (80 per cent.), spot and delivery November-December 1911, 127.50f. to 125f.; delivery 1912, 127.50f. to 125f.; and 1913, 120f. to 115f. These prices are understood for saponification material, with 3½ per cent. discount, and for glycerin from the lye 80 per cent. net, or with ½ per cent. discount.

Grindelia Robusta is offered at 7*d.* per lb. c.i.f. to arrive.

Guinea Grains offer from Hamburg at 87*s.* 6*d.* per cwt. c.i.f.

Gum Acacia.—Soudan continues to be firmly held with a fair business passing at from 50*s.* to 52*s.* 6*d.* per cwt. for fair to good half-hard sorts. Aden gums are scarce and wanted.

Hydrastis.—A limited quantity is available at 22*s.* 6*d.* net on the spot.

Iceland Moss has been advanced to 22*s.* 6*d.* per cwt. c.i.f. for at least 5-cwt. lots.

Ignatius Beans.—A parcel due in Hamburg shortly is offered at 1*s.* 1½*d.* per lb. c.i.f.

Insect-flowers remain firm, fair small closed offering at 150*s.* and fair half-closed at 120*s.* c.i.f. terms.

Ipecacuanha remains very firm, with a fair amount of inquiry. Cartagena is exceptionally scarce, both here and in Hamburg, and business has been done at 9*s.*, with 9*s.* 6*d.* asked, at the close. Holders of Matto Grosso and Minas ask 9*s.* 6*d.* and 9*s.* 3*d.* respectively. Nine bales have arrived from Rio.

In the annual report of the Bengal Government cinchona-plantations for 1910-11 it is stated that "the 2,000 cuttings of ipecacuanha-plants that were transplanted into nurseries in the previous year have all done well and another thousand were propagated during the year."

Lemon-juice.—English of the new season's pressing for forward delivery is offered at 1*s.* 8*d.* per gal., and

Sicilian at 1*s.* 2*d.* to 1*s.* 3*d.* on the usual 10 per cent. basis.

LEMON OIL.—The easier feeling noted last week with regard to new crop for next year's shipment continues, but few orders are being placed, buyers hoping for a still further reduction; for January-March shipment 4*s.* 8*d.* per lb. c.i.f. is quoted, and on the spot from 6*s.* 3*d.* to 6*s.* 6*d.*

A Palermo message dated October 21 states that the weakness of spot oil asserted itself further this week, some holders becoming discouraged and offered at lower rates. Although some orders have come in from abroad, a few sales have taken place, and for these lower prices were paid; on the other hand, new crop has again been stronger. Local speculators, who have a strong bullish position, came forward again, making contracts at full rates with those growers who were more inclined to sell, and their operations caused other sellers to keep off the market. Old crop is quoted 5*s.* 8*d.* c.i.f.

LINSEED is slow at 72*s.* 6*d.* to 75*s.* per quarter for good to fine quality.

LIQUORICE-ROOT is tending firmer, the value of common natural Persian on the spot being 12*s.* 6*d.* net.—gross for net; to arrive Russian decorticated is quoted 28*s.* 6*d.*, and double peeled at 42*s.* c.i.f.

LYCOPODIUM.—Russian is steady, with treble-sifted in cases offering at 1*s.* 10*d.* to 1*s.* 10¼*d.* per lb. c.i.f. for small lots, on the spot 2*s.* to 2*s.* 1*d.* has to be paid.

MANNA is offered at easier rates, bold white flake being quoted at 480*s.* per cwt. in 1-lb. tins and 406*s.* in 30-kilo. cases, c.i.f. terms.

MENTHOL.—The excitement in this article has continued, but the price has now reached such a dangerously high level and the spot stock to a vanishing point that business is of a quite meagre description, and applies mostly to single-case sales and broken bulk. It may be recalled that early last week American orders almost cleared the spot market at 16*s.* 6*d.*, after which the price rapidly rose to 18*s.*, touching 20*s.* to 22*s.* 6*d.* on Friday, 25*s.* to 27*s.* 6*d.* on Monday, 27*s.* 6*d.* to 30*s.* on Tuesday, 30*s.* on Wednesday, closing at that figure to-day. To arrive a large business has been done, the sales during the past ten days including October-November shipment at 20*s.*; November-December, 15*s.* 6*d.* to 20*s.*; November-January, 17*s.* 6*d.* to 18*s.*; December-January, 19*s.*; January-February, 22*s.* 6*d.*; January-March, 16*s.* to 17*s.* 6*d.*; March-April, 14*s.* 6*d.* to 21*s.* 6*d.* per lb. c.i.f. terms. *Latest*: Kobayashi-spot closes with sellers at 30*s.*, and for January-March 18*s.* 6*d.* has been paid. There are quotations in to-day from Hamburg offering to sell at 27*s.* 6*d.* and probably 25*s.*

MILK SUGAR.—There have been several offers of American powdered from dealers in Germany of limited quantities at prices considerably below those asked on the spot, and advantage has been taken of them in several quarters. Spot sales of American have been made at up to 95*s.* to 97*s.* 6*d.*, and for prompt shipment from Germany, small parcels are available from dealers' hands at about 90*s.* per cwt. c.i.f. Exports from the German factories are practically prohibited, there being insufficient for home-consumption.

MORPHINE.—The makers have advanced their price by 3*d.* per oz. to 11*s.* 9*d.* for hydrochloride powder.

MUSK is quiet, the value of fine blue skin pile I Tonquin pod being 67*s.* 6*d.* per oz., and old style 54*s.* to 55*s.*

MYRRH.—A parcel of 28 bags of dark chips ex auction has been sold at 40*s.*; for blocky Somali sorts 50*s.* is wanted.

OLIBANUM has been in more inquiry, the sales including fair drop at 46*s.*, middling garblings at 22*s.*, and siftings at 20*s.* to 21*s.* per cwt. on the spot.

OPIUM.—Market is quiet and unaltered, with usual 11½ per cent. offering at about 24*s.* 3*d.* per lb. c.i.f., and on the spot good Turkey druggists' is worth 25*s.* 6*d.* Persian is now very scarce on spot, up to 28*s.* having been paid. The *Leicestershire* has brought 61 cases *via* Marseilles, and 15 have also arrived from Smyrna.

A Smyrna correspondent writes on October 13 that the sales for the week amount to 19 cases old selected t.q. at 23*s.* to 25*s.* 6*d.*, as to quality, buying conditions, and strength. The Italo-Turkish war, however, and the general Continental money crisis have greatly affected trade in Turkey. The exchange on London has in consequence dropped about 2 per cent. for sight drafts and over 2 per cent. for three months' paper; therefore our opium quotations per lb. in sterling money are in accordance higher than what they would have been under our usual money conditions. The arrivals amount to 791 cases, against 3,517 cases at same date last year.

A Smyrna advice dated October 14 states that the sales for the week amounted to 20 cases of secondary qualities. Market closes firmly at pts.235 for extra Karahissar, and pts.225 to pts.230 for current choice Karahissar, or 25*s.* 4*d.* and 24*s.* 6*d.* to 25*s.* per lb. c.i.f. European ports. Taking advantage of the financial crisis which dominates the Smyrna market, buyers have looked for reduced prices, but holders refuse to sell even at ruling prices, in the hope of still higher quotations in view of the fact that stocks are daily diminishing and nine months must still elapse before the new crop. Arrivals in Smyrna since the opening of the season amounted to 791 cases, against 3,517 cases last year at the same date. It can now be definitely stated the crop in the Ottoman Empire will barely attain 2,500 cases.

ORANGE OIL.—A Palermo advice of October 21 intimates a lack of demand. Pressing has begun in several districts, and it has been possible to obtain a further reduction on last quoted prices. For shipment *sweet* is offered at 7*s.* 2*d.*, and *bitter* at 7*s.* 3*d.* per lb. c.i.f.

OXALIC ACID.—Although the price for prompt delivery is unchanged at 2½*d.* per lb. net, the quotation for next year's contracts has been advanced to 2⅝*d.* per lb. delivered.

PEPPER.—At auction 65 bags *white* Singapore sold without reserve at 7¼*d.* per lb. for ordinary mixed blacks. Market is dull privately, with sellers of fair Singapore at 8*d.* and black Singapore at 5½*d.* for fair on the spot.

PEPPERMINT OIL.—Interest has continued to centre in the Japanese description, the spot price of which has advanced about 9*d.* to 1*s.* in all, business having been done at from 6*s.* 9*d.* to 7*s.* 9*d.* per lb. for Kobayashi and buyers; for arrival a large business has been done, including January-March shipment at 6*s.* 9*d.* c.i.f., November-December at 7*s.*, and December-January at 7*s.* American tin-oil remains unchanged. *Latest*: November-December shipment sold at 7*s.* 6*d.* c.i.f., January-March at 7*s.*, and February-March at 6*s.* 9*d.* c.i.f.

PILOCARPINE.—A report has been current that an advance is about to take place, but we are unable to confirm it.

POTASSIUM CHLORATE.—Both British and foreign makers intimate that the prices for next year's delivery will remain unchanged. This also applies to soda chlorate.

QUININE is steady and unchanged, German in second-hands offering at 7*d.*, Amsterdam at 6⅝*d.* to 6¾*d.*, and Java 6½*d.* per oz. The Java factory has refused orders for a fairly large quantity at the current rates.

At the auction held at Amsterdam on October 20, 1,417½ kilos. (50,000 oz.) Ed. II. were sold at an average price of fl.10.33 per kilo., against fl.10.27½ per kilo. at the previous auction. The next auction will be held on November 10, and will consist of 1,417½ kilos.

RHUBARB.—Quite a large business has been done on the spot and to arrive, mostly in High-dried and rough round High-dried at higher rates. Fair medium and bold size flat High-dried has been selling at 10*d.* to 10½*d.* per lb. on the spot, and rough round at 7½*d.* c.i.f. for close at hand. Thirty-two cases of rhubarb have arrived *viâ* Havre; also 14 from Shanghai. The Chinese rebellion has given quite a spurt to the drug.

SANTONIN.—A further advance on this occasion of 4*s.* 3*d.* per lb. was announced by the Syndicate on Friday last, making the price for 2-cwt. quantities in one delivery 55*s.* 6*d.* per lb. net.; 1-cwt., 57*s.* 3*d.*; 28-lb., 60*s.*; smaller quantities, 61*s.* 6*d.* per lb. net.

SARSAPARILLA.—The spot price of Mexican is now 8½*d.* per lb.

SENEGA is steady at from 2*s.* 5*d.* to 2*s.* 6*d.* net on the spot according to holder.

SHELLAC remains quiet; fair TN Orange offering at 66*s.*; for November-December shipment TN is quoted 64*s.* and AC Garnet at 60*s.* 6*d.* c.i.f. Futures are lower, the sales including December at 68*s.* and March at 69*s.*, 68*s.*, to 67*s.* 6*d.*

Turpentine Oil.—A series of slight fluctuations leaves the price 3*d.* cheaper on the week, American closing at 36*s.* on the spot.

Valerian.—Belgian of new crop to arrive is offered at the lower rate of 37*s.* per cwt. c.i.f., and in another direction 40*s.* is quoted.

Vanilla.—At auction 141 tins new crop Seychelles offered, and practically all sold. Firsts were 6*d.* to 1*s.* and foxy and split 6*d.* higher. Fair to good firsts, 6½ to 8 in., sold at 18*s.*; 5½ to 7 in., 16*s.* 6*d.* to 17*s.*; 2½ to 7 in., 13*s.* 6*d.* to 17*s.* 6*d.*; common, 3 to 7 in., 11*s.* 6*d.* to 14*s.*; mouldy, 10*s.* to 12*s.* 6*d.* Ten tins Java sold at 13*s.* to 15*s.* 6*d.* for ordinary foxy.

Wax, Vegetable.—Japanese on the spot is unchanged at 41*s.*, and for arrival 38*s.* c.i.f. has been paid.

Manchester Chemical Market.

October 24.

There are few changes of importance to note in heavy chemicals, which remain firm with a fair amount of business passing. Soda-crystals have experienced a better demand, and are quoted about 55*s.* per ton, on rails, Manchester. Recovered sulphur is very steady at 4*l.* 12*s.* 6*d.* to 4*l.* 17*s.* 6*d.* per ton, on rails. Saltcake generally unchanged. Sulphate of copper is a shade firmer, and closes very steady at 19*l.* 15*s.* to 19*l.* 17*s.* 6*d.*, delivered Manchester; 15*s.* to 25*s.* per ton is asked for forward delivery. White powdered arsenic has a downward tendency, and is offering freely at 10*l.* 2*s.* 6*d.* to 10*l.* 7*s.* 6*d.*, delivered Manchester. Calcium chloride is steady at 1*l.* 17*s.* 6*d.* to 2*l.* per ton. Lump borax is quoted 16*l.* per ton. Acids and cream of tratar show little change. Oxalic acid is very firm, and quoted 2⅝*d.* per lb. for contracts over 1912. Muriate of ammonia has advanced to 25*l.* 10*s.* per ton. Sal-ammoniac is dearer by 20*s.* per ton; firsts, 43*s.*, and seconds, 41*s.* per cwt. Coal-tar products remain steady. Sulphate of ammonia may be quoted 14*l.* 3*s.* 9*d.* f.o.r. Manchester. This is about 25*s.* to 30*s.* per ton over last year, but there is still room for improvement. Carbolic acid and benzols are in sellers' favour. Creosote in bulk is quoted 2⅞*d.* per gal.

Heavy Chemicals.

A good all-round demand is being experienced in the heavy-chemical market both on prompt and forward account, and the tone of the market generally speaking is very steady. Export transactions continue of a satisfactory character.

Alkali Produce.—Main products are moving well, especially bleach and caustic. Ammonia alkali and saltcake good, but probably a shade quieter. Bleaching-powder, prompt, 4*l.* 15*s.* to 5*l.* for softwood casks, on rails; contracts on basis of 4*l.* 2*s.* 6*d.* to 4*l.* 7*s.* 6*d.* for softwoods on rails. Caustic soda, home trade, 76 to 77 per cent., 10*l.* 7*s.* 6*d.*; 70 per cent., 9*l.* 12*s.* 6*d.*; 60 per cent., 8*l.* 12*s.* 6*d.*; and export, 7*s.* 6*d.* per ton less. Ammonia alkali, 4*l.* to 4*l.* 5*s.* per ton, in bags, on rails. Soda crystals and saltcake as before.

Sulphate of Ammonia.—This market continues firm, with higher tendency in prices. Present nearest figures: Beckton, prompt, 25-per-cent. ammonia guaranteed, 13*l.* 16*s.* 3*d.*; London terms, 13*l.* 10*s.*; Leith, 14*l.* 7*s.* 6*d.*; Liverpool, 14*l.* 6*s.* 3*d.* to 14*l.* 7*s.* 6*d.*; and Hull, 14*l.* 2*s.* 6*d.*

Alumina Products are steady and tending higher. A large proportion of 1912 contract business has been settled at full prices, and in a goodly number of cases at slight advances on this year's figures. Crystal alum, lump, 5*l.* 7*s.* 6*d.* to 5*l.* 17*s.* 6*d.*; lump, in tierces, 5*l.* 12*s.* 6*d.* to 6*l.* 2*s.* 6*d.*; and ground, in bags, 5*l.* 17*s.* 6*d.* to 6*l.* 7*s.* 6*d.* per ton, free on rails, Lancashire or Yorkshire, or f.o.b. Hull, Goole, or Liverpool. Sulphate of alumina, purest qualities, practically free of iron, ordinary strength quality, 4*l.* 12*s.* 6*d.* to 5*l.* 2*s.* 6*d.* per ton, in casks, with customary allowances for bags and loose slabs, and usual extras for the same pure quality in higher concentrations. Alumino ferric, 50*s.* to 57*s.* 6*d.*, and aluminous cake, 50*s.* to 57*s.* 6*d.*, according to quality, quantity, and destination. Hydrate of alumina, purest quality and high strength Al_2O_3, 12*l.* 10*s.* to 13*l.* 10*s.* per ton, free on rails, in large casks. Aluminate of soda, purest quality and high strength Al_2O_3, 25*s.* to 27*s.* 6*d.* per cwt. Carbonate of alumina, 30*s.* to 32*s.* 6*d.* per cwt.

French Lavender and Spike Crops.

(*From the "C. & D." Correspondent, October 18.*)

The French lavender crop was a very bad one this year. In the spring prospects were good and the crop seemed to be important, so much so that the perfumers thought to see the old cheap prices again. But during the summer the hot weather and the drought prevented the growth of the plants, and many did not blossom. The distillation took place last month, and the oils are now coming on the market, but the prices are very high and good qualities very scarce. From a general point of view the perfumers do not now trouble about linalyl-acetate content, as they know that unfortunately there are some chemical-product firms going about in the mountains selling linalyl acetate and other products to distillers, showing the peasants working for the firms how to obtain a lavender oil with a high ester-number by direct distillation. It is true that some distillers do not buy, so that it is still possible to get a very good oil of fine odour, but without a high ester-value. As a result of the scarcity and the percentage of the oil from the middle to the end of the crop being extremely small, speculators bought a fair quantity coming on the market. The quality which sold last year at f. 24 to f.25 was sold lately on the Grasse market at f.40, so that the influence of speculation can be clearly seen.

The spike plant was influenced in the same way as the lavender by the dryness and the hot weather, and prices are also advancing. In the South of France f.4 to f.5 per kilo. more has been paid than last year, and I believe that the prices will advance further, as this oil is largely used by unscrupulous people to sophisticate lavender oil; many people also distil the spike and lavender together.

Fraudulent Traders at Smyrna.

In his annual report on the trade of Smyrna for 1910-11, the British Vice-Consul reports that bands of swindlers still thrive at Smyrna at the expense of the inept foreigner who believes that all is gold that glitters. A "Black Band" still finds ready dupes by time-honoured devices. Low prices, excellent references by fellow-scoundrels, magnificent samples, and well-sounding, cleverly worded letters are bait sufficient to out-manœuvre the caution of many a British firm, who long after their doom is sealed write tardily to their Consulate for information as to their victimiser's standing. [The names of members of this band will, at the discretion of the Director, be communicated in confidence to British firms interested, on personal application at the Commercial Intelligence Branch of the Board of Trade, 73 Basinghall Street, London, E.C.]

Linseed Oil.

We have on several occasions referred to the position of linseed oil and raw material, pointing out the difficulties which have beset crushers, in consequence of the scanty supplies, as compared with normal years. The contention of consumers naturally is that prices are bound to come down much further sooner or later, inasmuch as consumption has been curtailed by the increasing use of substitutes; but, as we have previously suggested, the levelling down of prices has so far made but slow headway. As a fact, it looks like being checked once more until River Plate crop prospects can be considered assured. The Argentine crop is now entering upon its most critical period, and, although indications are for a large yield, the cultivated acreage being 5½ per cent. more, or 3,922,360 acres, which compares with 3,714,435 acres last year, no great reliance can be placed on estimates until the middle of December. Meanwhile the serious misgivings which have been aroused lately by a fresh batch of highly conflicting reports as regards the American crop justify fresh comments on that score when it is remembered that America had during the last fiscal year to June 30 to depend on importations to the tune of over 300,000 tons (including the oil taken as seed). The market, indeed, has been somewhat startled by the still wider discrepancy disclosed by independent estimates compared with the last Government forecast. This happening simultaneously with a resumption of American buying both of seed and oil on this side is not without significance. Whereas the Government estimate issued quite recently was for a yield of fully 24,000,000 bushels, the estimates have just recently been cut down to 15,000,000 bushels, and that of the Canadian crop to 5,000,000 bushels.

Certificates of Origin for Turkey.

The Board of Trade notify that importations of Italian merchandise into Turkey have been made subject to a Customs duty of 100 per cent. *ad valorem*, and that certificates of origin will be required for all goods shipped to Turkey on and after November 1 from any European country, all Mediterranean ports, and Morocco and Egypt. Goods unaccompanied by such certificates will be regarded as of Italian origin until proof to the contrary is afforded. The certificates, which may be endorsed on invoices, must state the country of production or manufacture. They must be legalised by the "Commercial Tribunal" or municipal or police authority at the place of residence of the shipper or by the Customs authorities at the port of shipment, but need not be legalised by Ottoman Consuls. If the certificates are not endorsed on invoices, they must be drawn up on the official forms of the authorities named. Certificates must be presented at the Customs House of importation with the original invoices and the Customs declarations.

Proprietaries in Argentina.

REFERENCE has been made in The Chemist and Druggist to the regulations issued by the Argentine Republic whereby the ingredients in proprietary medicines and the quantities require to be stated on the label, the formulæ deposited, and all advertisements submitted to the Department of Hygiene. A fee has to be paid at so much per ingredient, so that the proprietors' statements can be checked by chemical analysis. The regulations were originally issued in 1910, but, owing to their unpopularity, have not been enforced until July of this year. The regulations apply to both imported and home products. The matter was taken up by the Owners of Proprietary Articles Section of the London Chamber of Commerce, and in June the Board of Trade was asked to use its influence on behalf of British exporters of proprietary articles. The reply from the Board of Trade was not altogether sympathetic, but, as the result of further correspondence, it was arranged that a deputation should wait upon Mr. G. J. Stanley, Assistant Secretary to the Board of Trade, in charge of the Commercial Department. A meeting of the Section was held at the London Chamber of Commerce on October 23, when fifteen members were present. Mr. E. Glover (Thomas Beecham) was in the chair, and it was arranged that the following, representing the different interests involved, should form the deputation: Mr. E. Glover, Mr. H. E. Webb (Evans Sons Lescher & Webb), Mr. A. E. Warden (Burroughs Wellcome & Co.), Mr. Horace Davenport (J. T. Davenport, Ltd.), Mr. J. E. Evans Jackson (Chairman of the Patents, Trade-marks, and Designs Section), and Mr. C. E. Town (Assistant Secretary of the London Chamber of Commerce). In the discussion which took place it was made clear that although the individual interests of the members were comparatively small, it was contrary to the interests of British traders that any market, however small, should be closed to them. Some proprietors have deposited their formulæ, as required, but in most cases it was stated that it would be impossible to comply with the regulations. The deputation then proceeded to Gwydyr House, Whitehall, S.W., when the following points were placed before Mr. Stanley by the various speakers: The regulations will only adversely affect proprietors of reputable medicines who cannot risk disclosure of genuine formulæ and will not state a false one. On the other hand, those proprietors of medicines which were the cause of the regulations will seemingly comply with the regulations, and their medicines will continue to be sold in the country. Money spent on trade-mark registration and advertising will be lost. The regulations do not distinguish between secret remedies and products intended for dispensing by chemists upon the prescription of medical men. The fact that advertisements are to be submitted shows that there had been in mind only those articles about which extravagant curative claims are made. Trade in the Argentine must suffer owing to the withdrawal of various products and of advertisements. The cost of carrying out the regulations is also a serious item to British business houses, as provision is made for a fee of at least $8 (14s.) for each medicinal substance contained in a preparation. In the case of a medicine containing six ingredients, and issued in various forms and sizes, the charge becomes excessive and onerous. It was suggested that the Board of Trade might use its influence to obtain an interpretation of the regulations so that only the quantity of certain scheduled drugs need be declared when these are present in the articles imported. The deputation seemed to make the greatest impression on Mr. Stanley from the point of view of the destructive effect of the regulations upon trade-marks, and the suggestion of a schedule of drugs to be declared was favourably received. An Official reply to the deputation will be forwarded.

Westminster College of Pharmacy.—The new prospectus just issued is a plentifully illustrated handsome booklet of thirty-two pages. In addition to particulars and fees of many courses of instruction available, biographical details of the founder are included. Mr. Wills also gives an outline of the rise and progress of the College, and sets out in type his advice to the student commencing his studies.

Correspondence

Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with.

Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest.

Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed.

The Cock's-comb Test for Ergot.

Sir,—We observe that Mr. James Grier is reported in your issue of October 21 to have said that "the effects produced in physiologically standardising ergot—viz., rise of blood-pressure and the production of gangrene—are neither of them due to the active constituent which acts upon the uterus." The natural inference from this statement is that ergot standardised by the production of gangrene—that is, by the cock's-comb test—is worthless from the point of view of the obstetrician. Kindly permit us to point out (1) that we have never placed any reliance on the blood-pressure test, and (2) that we have always stated that an ergot which has been proved to be active by the cock's-comb test will produce uterine contractions. Both of these propositions have recently received confirmation from a perfectly impartial source. In Bulletin No. 76 of the Hygienic Laboratory of the Public Health and Marine Hospital Service of the United States, Drs. Edmunds and Worth Hale give the results of an investigation of the different methods of standardising ergot physiologically, and we extract the following from the report:

"The authors conclude, both from their own work and from that of others, that the proposed chemical methods of assay throw little light on the therapeutic value of a preparation of ergot. . . . Three principal methods have been proposed for the physiological standardisation of ergot—the cock's-comb, the uterine, and the blood-pressure method; all are in use, and the chief object of the present work was to determine which is the most trustworthy. Inasmuch as ergot is ordinarily used for the purpose of influencing the activity of the uterus, the authors consider that a method based on the effects of the drug on this organ would have the most value. They find that different observers, working independently of each other, were by this method able to obtain concordant and satisfactory results. It is, however, tedious and somewhat expensive, and the authors were gratified to find a close parallelism between results obtained by this method and those obtained by the cock's-comb method, which was introduced some years ago by Houghton. On the other hand, no constant relation was found between the results obtained by these methods and the effects on the blood-pressure. . . . The authors recommend for practical purposes the cock's-comb method."

They go on to suggest a method for reaching an approximate quantitative result. It may be interesting to state, as a matter of history, that Dr. Houghton more than twelve years ago wrote as follows regarding the testing of ergot:

"The oxytocic power of ergot is determined upon pregnant animals; and the related hæmostatic action is determined by feeding cocks with the drug or extract, the result being that through its constrictive action upon the capillaries the comb and wattles of the fowl become black and in extreme cases even gangrenous."

Six years later Dr. Houghton, writing in the "National Standard Dispensatory," makes the following remarks:

"Extensive experiments have shown that a preparation of ergot that produces blackening of the cock's comb when given in suitable doses will likewise produce abortion in pregnant animals."

In the same article he goes on to state how a quantitative standard is reached by the use of the cock's-comb test. It will be observed, therefore, that the recent investigation by Drs. Edmunds and Worth Hale amply confirms what has been well known to us for at least twelve years, and what has been our constant practice during all that time. We thank you for this opportunity of making the position clear to pharmacists, so that they may always be able to

assure their medical clients of the activity of an ergot which has been properly standardised by the cock's-comb test. We remain, yours faithfully,

Beak Street, London, W. Parke, Davis & Co.

Drug-growing in Queensland.

A correspondent (116/20) having put the following question to us, we submitted it to Mr. R. C. Cowley, principal of the College of Pharmacy, Brisbane, whose reply we append:

"Would it be possible to cultivate the following English drug plants in Queensland: peppermint, lavender, chamomiles (for oil or dried herbs), belladonna, henbane, and digitalis (for leaves)? Would it pay to grow and send them over to the London market, or are there any other plants that it would pay to grow and send here?"

Sir,—It is difficult for anyone living in the British Isles to appreciate the extent of the State of Queensland and the variation in the climate of the different portions. Quite one-half of the State is within the tropics, and in the north most tropical plants, like the cinchonas, gingers, peppers, coffee, etc., thrive to perfection. The coastal districts further south possess a moist climate in which all sub-tropical plants flourish. The rolling downs behind the coastal range possess a much cooler climate, and it is there where British medicinal plants do best. Some of those mentioned by your correspondent thrive well on the downs and in some instances have become noxious weeds. This is the case with stramonium. Even in the Brisbane district this plant is common on waste ground. Peppermint and spearmint do well, but the native mint (*Mentha satureioides*) does better. It can be cut with a scythe in some places, and, judging from its odour, it should be rich in menthol; that I hope to prove some day. Lavender grows on the high ground, but a local wholesale druggist informs me that the oil he extracted from it was of poor quality. Chamomiles are grown in some places as a domestic remedy, as in England. I am told by our Colonial botanist, Mr. F. M. Bailey, that neither belladonna nor henbane has been grown here, but he thinks that, like the daturas and solanums, they would probably become noxious weeds, and we have too many of those already. Digitalis is an escape from cultivation in the Toowoomba and Warwick districts, and often assumes freak forms. Notwithstanding the suitability of the soil and climate of Queensland to grow almost every class of plant grown throughout the world, labour conditions are entirely against drug-growing as a financial proposition, even as an adjunct to ordinary mixed farming. Furthermore, a farmer would find it to his advantage to stick to his own profession; he could not find time or the labour for such side-lines as drug-growing. If you were to ask me what are the prospects of a person with capital and agricultural knowledge on the land I would unhesitatingly answer—Excellent, better than in England, but drug-growing under present labour conditions is impossible.

With compliments and best wishes to brother pharmacists throughout the British Isles.

I am, yours faithfully,

R. C. Cowley.

Some Weighty Questions.

Sir,—I am an authorised patent-medicine vendor, having paid my annual licence, and, by the way, a pharmaceutical chemist. As a "lost" person resident in a dull country village, I desire light and information on the following problems:

(A) Is it necessary to pass the Minor examination to sell patent medicines? The licence granted me states that I can "utter, vend, or expose for sale *any* medicines . . . . chargeable with Excise duty having stamped labels properly and sufficiently affixed." No mention of the term "poison" is employed in the licence or in the Medicine-stamp Duty Acts, see 52 George III., c. 150. How would the Pharmaceutical Council come off in a test-case if the Excise upheld their licence and allowed *any* licensed patent-medicine vendor to enjoy the terms of his annual contract?

(B) Is it necessary to pass the Major examination to use the title pharmaceutical chemist? The 1868 Pharmacy Act states that any person passing the Major examination may use any of the following titles and the use of such titles is restricted to such higher examination. The titles are pharmaceutical chemist, pharmacist, and pharmaceutist. These are evidently intended to be synonymous. Now the 1908 Act grants to persons passing the Minor examination the title "pharmacist." As pharmacist is synonymous with pharmaceutical chemist or pharmaceutist (1868), and as there is no mention in a comparative manner in the 1908 Act of the same terms, it must obviously follow that any person who qualifies by examination of the Pharmaceutical Society must be a pharmaceutical chemist or pharmacist. Is he?

(C) What is magnesia? The B.P. says magnesium oxide. What is fluid magnesia? The B.P. magnesium bicarbonate. Suppose I sell a penny box of mag. carb. levis labelled "Magnesia" to a Foods and Drugs Inspector. Prosecution and (conviction?) Would it make any impression on an intelligent Bench if I explained that by aëration with CO_2 under pressure we should get "fluid magnesia" from the offending pennyworth, and that by evaporation we must therefore get "magnesia"?

Yours densely,

Fog. (201/71.)

[The High Court of Justice, in the case of the Pharmaceutical Society *v.* Piper, decided in 1893 that dutiable medicines containing poison may only be sold by registered chemists and druggists, except when they are the subject of letters patent actually in force (The Society *v.* Fox, 1896). This answers question A. The 1908 Act, Section 3, permits a registered chemist and druggist to take, use, or exhibit the name or title of pharmacist, which was conferred upon chemists and druggists by Section 1 of the 1868 Act but taken away by Section 15. The word "pharmacist" was first used by the *C. & D.* as a designation of those following the pharmaceutical calling, and that was the sense in which it was used by Bulwer Lytton; but a "pharmacist" is not always a "pharmaceutical chemist"—only when he is registered as such. This answers question B. In C we have a question which has frequently been debated, and the only common ground of agreement is that "magnesia" is sometimes magnesium oxide; it is so in the British Pharmacopœia and some parts of the country, and "magnesia" is magnesium carbonate in other parts of the country, just as it was the carbonate for many, many years until evolution in chemical nomenclature shifted the designation to magnesium oxide.—Editor *C. & D.*]

Getting Rid of Fleas.

Sir,—The rocks are said to be a refuge for the conies, "but a feeble folk." There is a breed of smaller cattle that seek a softer rest. It is called by entomologists *pulex irritans*, and is immortalised in the ancient ballad:

"Mother Lee caught a flea,
And hung it up to dry;
Took it down, and chopped it up,
And made a mutton-pie."

In giddy youth "fun" was said to be putting a flea on a five-barred gate and tickling it with a long pole. In later years more serious thoughts, and royal, attach to the pursuit of this hexapod champion of the high jump, "for the King of Israel is come out to seek a flea." It was my lot to tenant a new house for a longer period than a man of forty can remember with only the rarest nodding acquaintance with this energetic fellow-inhabitant of the planet. But taking a private house for three years, under the impression that when the humans had left it it would be empty, my acquaintance became more intimate, and the royal game was serious. I had to enter on a campaign in which I was not only commander-in-chief, but common soldier. I prepared poison enough to depopulate the parish of all bipeds. Perchloride, carbolic acid, camphor, naphthalene, pyrethrum, colocynth, quassia, turpentine, oil of lavender, oil of birch, and every conceivable insecticide, until it seemed as if the cumulative effects would amount to suicide. The campaign lasted for three years, and I thought I must seek another house. My attention was diverted by foreign travel. Meanwhile the notion came into my head that perhaps there was some common ground on which we might agree. Perhaps these *pulices irritantes* do not like to be pickled. I don't. So in the fourth summer I sprinkled the sheets with dilute acetic acid; and though we have had the hottest and brightest summer for many a year, I have *not seen a single flea.* Whether *post hoc, ergo propter hoc*, or whether, like Methodist parsons, they only stay three years in one place, I cannot tell. I merely state the fact, and am

Gratissimus. (200/41.)

Christmas Perfumery Trade.

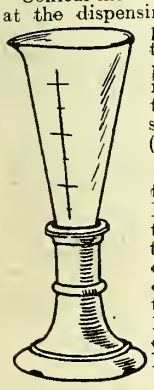
Sir,—Is the demand for perfumes getting less, or is the draper taking most of this trade? My opinion is that the latter is the cause of the trouble; but if the chemist would only "take the bull by the horns" and offer the public better quality perfumes, he would retain the trade, as the public will take a chemist's word for quality, whereas they only buy the lines displayed at a draper's on their face value. How often have you heard the remark, "Oh, yes, the casket was very nice, but the perfume was not up to much"? The public will always pay a fair price for a good article, and there will always be a demand for perfume. Another point is, I think chemists should give the preference to a firm who only supply chemists, as it is not a very nice experience, after making a good window-show of perfumes, to go down the street and see the same lines in an outfitter's or draper's. The last remark I should like to make is, chemists as a rule do not devote enough time to seeing travellers' samples (a good traveller does not want to waste their time or his own), and some of the most successful chemists of to-day are men who will always hear what a traveller has to say and see his samples. C. V. (193/2.)

Subscribers' Symposium.

For questions, answers, incidents, and interchange of opinions among "C. & D." readers.

A Holder for Broken Measures.

Conical measures 3ij. which have had their feet broken off at the dispensing-counter can be restored to the upright position by making use of the Universal tooth-brush stand, made of metal, nickel-plated, costing 3*s.* per dozen. The measure is not fixed in, as that would interfere with the reading of the lower graduations, but just stands in it, as shown in the sketch.—*W. C.* (202/23).



A Democratic Proposal

to the Pharmaceutical Society of Great Britain.—I think it would be a good plan for the Council to pass a new by-law embodying the following idea: "That in the interests of the Society as a whole it is advisable, in order to increase the membership, to separate the membership-fee from the 'Journal'—viz., 10*s.* 6*d.* instead of a guinea—and make it optional to take the paper for the guinea." Readers, please comment.—*J. E. Powell* (Derby).

Duplicate Order-books.

Many firms now send to their customers duplicate post-card books. These are most useful. Why cannot they issue a book which may be used for a fairly large order? There are many mistakes made with the sundry and photographic houses. Such a book would be most useful, and for my part I would be glad to have one even if a small charge was made towards the cost.—*A Country Chemist* (200/42).

A Very Healthy Errand-boy.

A Town Traveller (168/65) sends this account of an incident which actually happened last week: A London chemist advertised for an errand-boy, and while interviewing one applicant he asked him, "Are you healthy?" "Yes," replied the boy. "Never had any illness?" "No," replied the boy, "but I have fits sometimes." "Oh! do you," said the surprised chemist. "Yes," said the boy, quite proud of the fact; "lots of 'em. The doctor says next one I have I shall either die or go mad!" The boy now seeks another upon whom to practise his final act.

Legal Queries.

Consult the Legal Advice Section of "The Chemists' and Druggists' Diary," 1911, p. 435, before writing about your difficulty.

L. S. W. (201/13).—"Heal All" is regarded as a dutiable description for any medicinal preparation.

Vacuum (202/62).—To say on a preparation that "It is the finest pick-me-up known" will not make it liable to medicine stamp-duty.

Cymro (224/28).—There is no fixed solicitor's fee for applying for a wine-licence. We have made inquiries, and are informed that the usual charge in London is about 5*l.* 5*s.* and out-of-pocket expenses.

Justice (204/5).—In Scotland a month's notice is usually given to and by chemists' assistants, but in some cases a week only. We are not aware of any court cases in Scotland where a rule has been established, but there are numerous decisions in England in favour of a month.

Aectas (200/6).—Chemists and druggists in Great Britain must label salt of lemon "Poisonous"; "Poison" will not do. In Ireland, however, in order to strictly conform with the law, both "Poison" and "Poisonous" should be used, as the provision under the Poisons Act, 1870, was not repealed by the 1908 Act. It also follows that unqualified persons in Ireland may not (as in Great Britain) sell soluble oxalates.

S. E. W. (196/47).—(1) The Pharmaceutical Society of Great Britain does not recognise the pharmaceutical certificates of any British Colonies for registration as chemist and druggist without examination. Power is given under the Poisons and Pharmacy Act, 1908, to make by-laws for this purpose, but these by-laws have not yet been formulated. (2) The amendments to Clause 14 of the National Insurance Bill dealing with the dispensing of medicines were contained in the *C. & D.* of August 5, index folio 237.

H. J. E. (202/65).—(1) We have previously advised retail chemists (see *C. & D.*, September 30, index folio 525) who sell Winchester quarts of mineral acids to make them "distinguishable by touch" by the application of corrugated paper. (2) It is quite in accordance with the Poisons and Pharmacy Act, 1908, to use old stock labels in order with additional labels to meet the new regulation, thus:

Caution!
Not to be taken.

Spirit of Salts.—Poison.
(Name and address.)

Poisonous.

Although the wording of the Order in Council implies that all these words should be printed on one label, the Act itself does not mention "label" or "labels," but speaks of the substances being "labelled," thus three labels are as legal as one.

Miscellaneous Inquiries.

We do not as a rule repeat information given in this section during the past twelve months. When references are given to past issues, these should be consulted. Back numbers for the past five years can generally be obtained from our office at the published prices. We do not undertake to analyse and report upon proprietary articles.

J. W. G. (221/32).—American Liniments.—We have no recollection of having published recently formulæ of the class you mention. The following are of the type you desire:

1.		2.	
Capsicum-powder	3j.	Camphor oil ...	3viij.
Fusel oil ...	3iv.	Turpentine ...	Oij.
Origanum oil ...	3iv.	Benzene	3xvj.
Sassafras oil ...	3j.	Cottonseed oil ...	3xvj.
Turpentine ...	3viij.	Capsicum-powder	3j.
Paraffin oil ...	3xxxviij.		

Macerate for twenty-four hours, and strain.

Macerate the capsicum with the benzene for three days, strain, and add the other ingredients.

Balsam (189/34).—Linen-gloss.—The sample of linen-gloss paste you send appears to be simply white soap made into a paste with boiling water. The paste form of linen-gloss is generally associated with French chalk.

H. R. W. (Buenos Aires) (193/37).—Nail-polishing Stick:

Putty-powder	3 oz.
French chalk	1 oz.
Carmine	10 gr.
Camphor	2 dr.
Rose-geranium oil	3 drops
Neroli oil	3 drops

Mix together, form into a paste with thin mucilage of tragacanth, and roll into sticks on the bed of a pill-machine.

F. P. (197/63).—Softening Leather.—The alternative to the employment of greases and oils is treatment with boiling water after the manner of the shoemaker when he is shaping leather to a last.

Greta (196/54).—Pharmaceutical French.—This is especially dealt with in C. H. Le Bosquet's "Manuel d'Anglais à l'usage des pharmaciens" (2*s.*, Twentieth Century Press). We do not know of a similar book dealing with photographic goods.

Kidney (193/28).—Kidney and Bladder Mixture.—The sample you send appears to be of a very simple type—potassium bicarbonate, potassium nitrate, and vegetable bitters; but the favourite mixture of this class is one containing buchu, such as the following:

Potass. bicarb.	ʒiss.
Potass. nitr.	ʒss.
Sp. chlorof.	ʒj.
Inf. gentianæ co.	Oj.
Inf. buchu ad	Oiv.

Dose: Two tablespoonfuls three times a day.

C. W. H. (196/66).—Paper-varnish.—The following are suitable for paper, and are best applied after sizing the drawings with gelatin solution:

1.		2.	
Gum dammar	4 parts	Pale resin ...	9 oz.
Pale resin ...	1 part	Canada balsam	9 oz.
Turpentine	6 parts	Turpentine	3 pints

W. H. B. (197/70).—Foot-rot Paste.—The addition of glycerin or honey to the paste will probably prevent it drying up in the tins in which it is packed. We should be able to advise you better if you disclosed the formula for the preparation.

E. S. B. (191/64).—Ammonium persulphate rubbed on the fingers stained with amidol will probably remove the stains at once; it answers well with those produced by pyrogallol.

Chemieus (187/28).—Silvering Glass.—There have been many formulæ published for the process of preparing mirrors, but the following by Edel is a modern one:

1. *Silvering Liquid.*

Silver nitrate	30 grams
Distilled water	240 grams
Solution of ammonia	a sufficiency

Dissolve the silver salt in the water, add the ammonia until the precipitate at first formed is redissolved, filter, and make up to 480 c.c. with water.

2. *Reducing Liquid.*

Potassium sodium tartrate ...	0.75 gram
Water	300 grams
Silver nitrate	0.166 gram

Dissolve the Rochelle salt in the water and boil, then add the silver nitrate and boil for from ten to fifteen minutes until grey. Filter, and make up to 480 c.c. with water.

For use, 30 c.c. of each solution is mixed diluted with 120 c.c. of water and poured over the surface of the glass to be silvered. In about an hour the whole of the silver will be deposited, the glass being then rinsed in water, set up on edge to dry, and finally backed with a protective coating of asphalt-varnish. Before silvering, the glass must be scrupulously clean, or an even coating of silver cannot be obtained.

Compo. (192/50).—Composition-powder.—The following is the formula for this which is usually employed:

Powdered bayberry-root bark ...	12 oz.
Powdered ginger	6 oz.
Powdered capsicum	1 oz.
Powdered cloves	1 oz.

Mix. Dose: A teaspoonful in a cup of hot water, sweetened. This may be sold as a "known, admitted, and approved remedy" if "P. F." is quoted on the label.

W. S. S. (201/24).—Waterproofing Cloth.—See *C. & D.*, March 19, 1910, index folio 456, for the alum and lead acetate process; and *C. & D.*, April 22, 1911, index folio 583, for the aluminium-acetate process employed by the French War Department.

A. B. (197/39).—(1) Furniture Decay.—There is no connection between worm-eaten furniture and dry-rot. The latter is due to the ravages of a fungus which develops on wood joists and boards in places where the air is stagnant. The treatment consists in applying mercury-perchloride solution and creosote. In the case of worm-eaten furniture the parts should be soaked in paraffin, turpentine, or benzene and the holes afterwards filled up with beeswax. (2) The new edition of "Pharmaceutical Formulas" was published this week, and a new edition of "Veterinary Counter-praetice" earlier in the year.

Breton (Dinard) (195/51).—(1) Self-taught German.—The following will answer your purpose; the first-named book should be studied first: Whitaker and Braun's "Modern Method of Learning German" (3*s.*, Whitaker & Sons), Moffat's "Science German Course" (3*s.* 6*d.*, Clive), Otto's "German Conversation-Grammar" (5*s.*, Julius Groos). (2) "Registered apprentices or students" are persons whose Preliminary certificates have been approved by the Pharmaceutical Society. A "Student-Associate" is an unqualified person who subscribes to the Society.

H. A. (170/31).—(1) Ince's "Elementary Dispensing Practice" (Office of *C. & D.*, 3*s.* 6*d.*). (2) Books on Bacteriology.—Pearmain and Moor's "Applied Bacteriology" (Baillière, 12*s.* 6*d.*) or Thoinot and Masselin's "Outlines of Bacteriology" (Griffin, 10*s.* 6*d.*) would suit your requirements. (3) Books on Alchemy.—As a basis of a lecture on the rise of chemistry you should read books on historical chemistry, of which the following are the most suitable: Ladenburg's "History of the Development of Chemistry" (Simpkin, 6*s.* 6*d.*), Thorpe's "Essays in Historical Chemistry" (Macmillan, 12*s.*), Wootton's "Chronicles of Pharmacy" (Macmillan, 21*s.*), and Von Meyer's "History of Chemistry from Earliest Times to the Present Day" (Macmillan, 15*s.*).

Denthorn (185/41).—Eucalyptus Dog-soap.—The following formula for a liquid soap for washing dogs was published in the *C. & D.* some years ago; it makes an excellent preparation for the purpose:

Sapo mollis	ʒxxx.
Ac. carbol.	ʒiij.
Ol. eucalypti	ʒj.
Aqua ad	Cj.

Dissolve the soap in hot water, and when quite cold add the carbolic acid and eucalyptus oil. The directions for use are as follows: Wet the dog thoroughly with warm water, beginning with the head. Pour the liquid soap along the back and work up a copious lather on every part of the animal, adding more water and liquid soap as required. Rinse the dog well in tepid water, wipe dry, and finally exereise.

H. S. (195/57).—We do not undertake analyses.

J. B. (194/57).—Dog's Coat Cleaner.—The powder employed for dry-cleaning the coat of a white dog is magnesium carbonate. The powder is well rubbed into the dog's coat and then rubbed out with cloths or a soft brush.

J. W. (193/74) wants to improve the coat of a Yorkshire terrier pup four months old. How can he do it? [The best means to promote the growth and beauty of the coat is regular use of comb and brush. At intervals rub into the coat the yolk of an egg, and on no consideration use too warm water. Should the coat become muddied, let the mud dry on and brush thoroughly when dry. An emulsion of yolk of egg and glycerin with enough eucalyptus oil to "nose" it applied three times a week and thoroughly brushed off when dry will produce a sleek coat and also promote the growth of the hair.]

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," October 15, 1861.

Prescriptions by Chemists and Druggists.

In the course of an editorial article on "the right of chemists and druggists to prescribe" the provisions of the Apothecaries Act, 1815, were quoted and discussed, and it was shown that "the right of chemists and druggists to sell medicines, whether simple or compounded, and, moreover, the right to 'compound' or 'dispense' such medicines, [had been] indisputably confirmed." The article proceeded to look into the interpretation taken of the Act by the Apothecaries' Company itself, and mentioned a circular issued by the Company regarding the essential grounds of prosecution for penalties, which contained the following statement: "The first point, therefore, to establish in each case of practice is the nature of the disease. Next that the defendant *attended the patient*, and prescribed and supplied medicines for his cure or relief; and lastly, that *the attendance* and supply of medieines were with a view to gain. Again, we find that proof is required that 'the defendant gave no intimation that his services were gratuitous.' Hence we perceive that an intimation to this effect will, in the opinion of the Apothecaries,—the plaintiffs be it remembered,—protect the defendant from trouble at their hands. There ean be nothing easier than to print upon the bill-head which every customer receives from his chemist and druggist, 'No charge for medical attendance.' The same notification might be exposed—say in a glass frame, in the shop." The apothecaries' view being thus clear,—that *exclusively of the saving clause* relating to chemists, *no person* is to be prosecuted under their Act *who does not charge for attendance*,—it may well be asked, "Why the saving clause at all, if no further privilege is to be conferred upon the parties for whose express benefit it is enacted?"

THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C. SATURDAY, OCTOBER 28, 1911.

A Copy of this Supplement is inserted in every Number issued of "The Chemist and Druggist."

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8.—LONDON, N.—Returns £1,050; net profit £250; price £450.

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5.—HOME COUNTY.—Old-established Business, in same hands many years; unopposed; returns £400; net profit about £175; best position; low rent; price £250.

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10.—HAMPSHIRE.—Sound Light Country Retail Business; returns over £500 under manager; low rent; nice house and garden; modern-fitted shop, fully stocked; price about £400.

11.—KENT.—Old-established Light Retail; has done £1,000; returns under manager £650; net profit £220; plenty of scope; good premises; low rent; price £500, or offer.

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TO be Let, an old-established Herb and Drug Business; small capital required. Apply, Surgical Hosiery Co., Ltd., Russell Street, Nottingham.

PARTNERSHIPS.

A FIRM of Chemists (London), about to form a company, require a young energetic man (qualified or unqualified) to manage the business; preference given to one that can Extract, but not essential, and prepared to invest £250, for which full security will be given. Apply in first instance, "Energetic" (237/11), Office of this Paper.

DISINFECTANTS, PROPRIETARY ARTICLES, SOUTH AMERICA.—Englishman (37), with long experience in Disinfectants and thorough knowledge of principal South American markets through residence in the Brazils and Argentine, speaking Portuguese, French, and German fluently, desires responsible position in high-class concern, either in England or abroad; could introduce business and capital. 239/29, Office of this Paper.

MANAGING Partner (qualified) wanted for a Cash business with good turnover in the North of England; only energetic men and those who have had an all-round experience need apply; a good opportunity for a smart man with small capital securing a really sound Business; owner retiring next year. State age, experience, references, and amount of capital at command. Apply, "Aurum." (237/25), Office of this Paper.

PARTNERSHIP wanted by gentleman with thorough all-round knowledge of the trade and good connection in India; can invest £1,000 in January, or before if necessary. Replies, principals or solicitors only, to "M.," c/o A. Chapman, Esq., 37 Mark Lane, E.C.

PARTNER or Manager wanted; young gentleman (single); one who understands the Packing of Wholesale Druggists', Oilman Sundries; advertiser, 25 years in the business, wishes to give up this department. Apply, by letter only, Highett, 10 Finsbury Square, E.C.

BUSINESSES WANTED.

ADVERTISER is open to purchase for cash sound Business showing net profit of not less than £300; any county, but Southern or Western preferred; good house essential; references given; replies treated with absolute confidence. Particulars to 237/3, Office of this Paper.

WANTED, good-class Business, doing from £1,200 to £1,500; in North Midlands, Lancashire, Yorkshire, or Cheshire preferred. Apply, 233/39, Office of this Paper.

WANTED, a small Business; one that has been neglected preferred if capable of increase; not swamped by competition; lump sum down and remainder by arrangement; genuine concern only entertained, as an investigation would be required; people who do not keep records of their business need not reply. 236/30, Office of this Paper.

WANTED to purchase a good-class Business; London or within an easy distance. Full particulars, in confidence, "Bramley" (236/4), Office of this Paper.

WANTED, a good Business, showing a net profit of £500 or £600 a year, in or near London, or seaside preferred. S. G. Baker, Pharmacist, 16 Church Street, Greenwich, S.E.

AGENCIES.

INDIA.—Advertiser, 20 years' experience in the East, is open to act as Managing Representative in India for first-class firm Manufacturing Chemicals, Pharmaceutical Preparations, or Drug-trade specialities, other than Disinfectants; terms would include power of attorney to act for the firm, monthly allowance plus commission, and contribution towards office, etc., expenses. Address, 191/33, Office of this Paper.

RUSSIA.—An English Company recently formed is open to take up Agencies for Russia. Apply to British Russian Trading and Investment Corporation, Ltd., 8 Lloyd's Avenue, London, E.C.

AGENTS for Toilet Soap, calling on Chemists only, wanted at once; Northern, Midland, and Eastern Counties; Specialities only. Send fullest particulars to Christr. Thomas & Bros., Ltd., Broad Plain Soapworks, Bristol.

GENTLEMAN, speaking two foreign languages, well connected with Doctors, Chemists, and Hospitals, desires responsible position or Agency, home or abroad; 14 years' experience, Drugs, Tabloids, Tablets, and Toilet Preparations, also well connected abroad; C. qualification; only firms of good standing need reply; highest credentials and bank references if required; disengaged November 1. 239/36, Office of this Paper.

GOOD Agency wanted by business man who is shortly leaving for South Africa, Australasia, Ceylon, etc.; an excellent opportunity for direct Representation. Address, "Export," 44 Maddox Street, London, W.

PERMANENTLY remunerative Side-line Agency and exclusive territory on commission offered Traveller with established connection amongst Chemists; article is quite new, wanted in every home, and will be well advertised. Write, 232/31, Office of this Paper.

TRAVELLERS and Agents wanted to take up as a Side-line the sale of our Liquorice on a commission basis; same is advertised amongst all the Chemists in the United Kingdom, and therefore only requires following up; small pocket sample; high commission; season now commencing. Russian Liquorice Works, Uralsk, Muswell Hill, London, N.

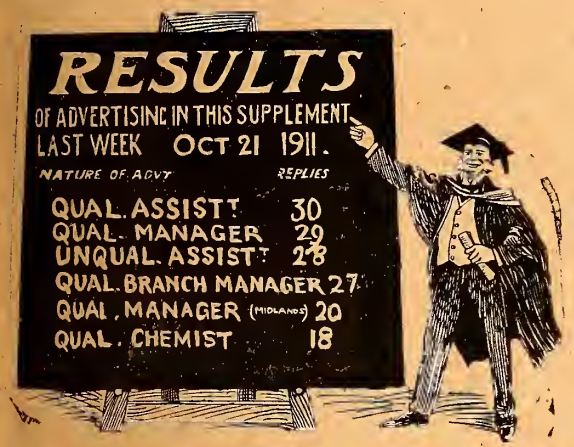
APPRENTICESHIPS.

WANTED to Apprentice well-educated youth in good-class Pharmacy; passed Prelim.; no premium. Haiden, Bryn Derwen House, Penrhys Road, Tylorstown, Glamorgan.

SITUATIONS OPEN

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.



This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or nom de plume.

TO SAVE TROUBLE.

MANY correspondents answering advertisements in this Supplement enclose remittances to cover the cost of forwarding their letters to advertisers who prefer to be addressed c/o this Office. The Publisher desires to make it clear that this is quite superfluous and perhaps this reminder will obviate the necessity of the frequent return by him of such remittances.

ANSWER IN TERMS OF THE ADVERTISEMENT AND

REMEMBER you are one of possibly hundreds applying for the same position. Put your case before the advertiser so that he may be able to form a MENTAL PICTURE of your suitableness.

BE BRIEF BUT CLEAR—millions of applications are consigned to the waste-paper basket UNCONSIDERED, because the reader cannot form this picture from the inadequacy of the materials set before him.

RETAIL.

BROADSTAIRS.—A Junior Assistant required; must be a reliable Dispenser and a good Counterman, with some knowledge of amateur Photography; outdoors; weekly half-holiday. State salary, enclose photo, Julian Horrell & Co., The Pharmacy, Broadstairs.

CHELTENHAM.—Junior Assistant or Improver wanted (indoors, one only kept), for Light Retail, Dispensing, and Photographic business; no Extracting required. In reply please state age, height, experience, reference, and salary required, with photo (if convenient), to Arthur Hill, Chemist and Dentist, 98 High Street, Cheltenham.

CHICHESTER.—Capable Assistant wanted for first-class Family Business; must be competent Salesman and Dispenser and possess excellent references. Fullest particulars, salary required (outdoors), with photo, to Horton, Chemist.

CROYDON. — Qualified Assistant wanted at once for an old-established Family and Dispensing business. State age, height, salary required, etc., enclosing photo, H. Paget Matthews, Pharmacist, 38 George Street, Croydon.

CROYDON.—Assistant; 23-25; outdoors; good-class Counter and Dispensing experience. Enclose photo and give full particulars, stating salary required, to S. A. Noble, Selsdon Road, South Croydon.

DOVER.—For November 2, qualified man to Manage a Retail and Prescribing business; age 40 to 50 years; must be trustworthy, reliable, and obliging; reasonable hours and permanency to suitable man. Give fullest particulars and salary required (in or out), to Cartwright, 52 Biggin Street, Dover.

HALIFAX (outdoors).—Wanted, smart man, qualified, as Branch Manager; must be good Window-dresser, Counterman, and able to control; no Sunday duty; weekly half-holiday. Apply, stating experience, age, height, salary required, and enclose photo, to the Secretary, Taylors' (Northern), Ltd., 3 Woolshops, Halifax.

INLAND Watering-place near London. — Qualified Assistant wanted early in November, to take charge of Branch business; good-class Dispensing and Retail, with Photography; suitable experience and practical ability essential. Apply, with full particulars, stating salary required (outdoors), and enclosing photo, to "Pharmacist," c/o The British Drug Houses, Graham Street, City Road, London.

LANDORE, Swansea.—T. Dryden, M.P.S., requires immediately a qualified Assistant or Manager, about 23 to 26; moderate hours; outdoors; one able to speak Welsh preferred, but not absolutely essential. Send full particulars, salary required, etc.

LIVERPOOL.—Manager, qualified, for Branch; must be trustworthy, reliable, and obliging, abstainer, and married preferred; weekly half-holiday; to live on premises. Apply, with full particulars, stating age, experience, salary, with references, and photo if possible, to W. Ashworth, Chemist, 24 Seaforth Road, Seaforth.

LONDON, S.W.—Junior, about 22, gentlemanly, for high-class Retail and Dispensing; smart at Counter; part or whole time. Apply, stating salary required and enclosing photograph, to "Ph.C.," 71 East Hill, Wandsworth, S.W.

LONDON W. — Assistant required, accustomed to good-class Retail and Dispensing business. Send full particulars, age, references, and salary required, to W. A. Weston, 8 Sandringham Parade, Ealing, W.

LONDON, N.W.—Assistant wanted, experienced in London Retail, Dispensing, and Photography; also Junior or Improver; sleep in, dine out. Apply, with full particulars, to 235/35, Office of this Paper.

LONDON, N.—Wanted, a Part-time Assistant for three whole days a week in good-class Retail and Dispensing business; outdoors. Please state age, height, experience, and salary, 237/1, Office of this Paper.

LONDON, W.—Wanted, Junior Assistant, about November 8, for good-class Dispensing business; indoors; 2 employed; must be quick and good Stockkeeper. State age, experience, and salary required, also reference, to J. W. Feltwell, 91 Hammersmith Road, West Kensington, W.

LONDON, W. — Indoor Assistant; age about 24-26; qualified by preference, but not absolutely essential if with good all-round experience; energetic, and with knowledge of Photography; abstainer preferred; half-day off weekly. Salary required and usual particulars to Barton Dell, 148 King Street, Hammersmith, W.

LONDON, S.W.—Qualified Senior Assistant required, in November, for first-class Dispensing business; one who will be capable later of taking management; commencing salary £120 per annum; board out, sleep in. Apply, giving full particulars as to past experience, to "M. C." (236/7), Office of this Paper.

LONDON, S.W.—Qualified Assistant, age about 30, married, to reside over premises; permanency; good all-round experience essential. Apply, with full particulars as to age, salary, and experience, to A. T. Gray, 5 High Street, Barnes.

LONDON, S.W.—Wanted, Junior, unqualified, part-time Assistant, age not over 21; salary 12s. a week (indoors). Apply, by letter, with references and photo, to "Drs.," 32 Bedford Hill, Balham.

LONDON, S.W.—Steady and reliable Assistant wanted at once; unqualified; outdoors; preference given to one that can Extract and can Prescribe. Apply 153 Dawes Road, Fulham.

SITUATIONS OPEN *(continued).*

LONDON, S.W. (near Schools).—Assistant (indoors) immediately, with good-class experience. State full particulars, with photo (to be returned), F. H. Glew, 156 Clapham Road, S.W.

LONDON, S.E.—Wanted, a trustworthy unqualified Assistant (indoors) for a small Drug-store; one who can Prescribe or Extract preferred. Apply, stating age, references, salary (which must be moderate), and whether an abstainer, to Chemist, 9 The Village, Old Charlton, S.E.

LONDON, S.W.—Wanted, Junior Assistant at once; must be good Dispenser; indoors or outdoors. Apply, W. J. Boyes 61 Balham Hill, S.W.

LONDON, S.E.—Unqualified Assistant, about 30; must be energetic, understand Photography, well up in Prescribing, and capable of taking charge; moderate but progressive salary to earnest worker. Reply, stating full particulars as to age, height, experience, previous engagements, and salary required, to "I. X. L." (239/27), Office of this Paper.

READING. — Wanted, qualified Assistant (indoors preferred), gentlemanly and obliging, for good-class Dispensing and Light Retail; must be well recommended. State usual particulars, with salary required, to J. C. Rowell, 3 Duke Street, Reading.

SOUTHSEA.—An Improver or Junior; out-of-doors. Apply, with full particulars, salary required, etc., to "H. W." (236/19), Office of this Paper.

YORKS. (Seaport Town).—Wanted, smart Assistant; one used to a quick Cash or Store trade; outdoors; young man preferred. Apply, with full particulars, and photo if possible, to 235/36, Office of this Paper.

A QUICK, active, young man for country business: permanency. State age, salary, etc. (outdoors), Busby, Harpenden.

ASSISTANT for good-class Country Light Retail, Dispensing, and Photographic work; half-holiday weekly; one hour alternate Sunday evenings; 28s. to 30s. weekly (outdoors). Full particulars and references in first letter, A. G. Reid, Chemist, Peterstield.

ASSISTANT, unqualified, unmarried; good experience and Dispensing, Counter work and Dressing Window. Send photo and references, "W.," Messrs. Wright Layman & Umney, Southwark Street, London, S.E.

ASSISTANT wanted, aged about 25, in West-End establishment, with good knowledge of Surgical Instruments. Write fully to 965, Sell's Advertising Offices, Fleet Street, Loudon.

COUNTRY Chemists, Booksellers, and Stationers require at once young man accustomed to the routine of Chemist's business, to help in all departments; good opportunity to one not able to qualify to learn another business. Apply, with full particulars, 235/17, Office of this Paper.

GIBSON DIXON, 1 Corn Market, Halifax, has a vacancy for a competent unqualified Assistant, age about 24; easy hours; weekly half-holiday; outdoors. Give full particulars, stating height, age, references, and salary required in first letter, enclose photo if possible.

JUNIOR Assistant (outdoors) for good-class business in Surrey. Apply, with full particulars and photo, to Chapman, Chemist, Esher.

JUNIOR, about 21; £30 (indoors). J. H. Smith, The Pharmacy, Moreton-in-Marsh.

JUNIOR wanted, about 22; outdoors; good-class Dispensing and Retail; London Suburb. Apply, with particulars, to L. H. Knight, 3 The Exchange, Purley.

JUNIOR (unqualified) wanted; must have had experience in Photography and Window-dressing; wages 30s. per week. Apply, with full particulars, to 239/13, Office of this Paper.

JUNIOR (outdoors), one who has had about 5 to 7 years' experience, in good-class Retail, Dispensing, and Photographic business; weekly half-holiday; no Sunday duty; must be active, neat, and good Counterman. Apply, with full particulars and salary required, Shilleock & Sons, Chemists, Bromley, Kent.

LADY Dispenser required by Medical man in Islington district; outdoors; some experience preferred. Apply, 239/10, Office of this Paper.

LEWIS & BURROWS have a vacancy for a qualified Dispenser; first-class experience essential. Apply, enclosing photograph and stating salary required, to 146 Holborn Bars, E.C.

MANAGER, qualified, for Branch shop; light Retail trade; must be smart, up to date, and thoroughly reliable. Apply, with full particulars as to age, references, and salary required, to 236/1, Office of this Paper.

MANAGER (qualified) for a business in the North of England; must have had a good all-round experience, good Counterman; abstainer preferred; state age, height, salary expected, and references, enclose photo; man wanting permanency or one with some capital with a view to succession entertained. "Vera" (237/52), Office of this Paper.

OUTDOOR Assistant; must be a good Counterman and reliable Dispenser. State age, references, height, salary required, and enclose photo, to W. T. Hicks, 294 Newport Road, Cardiff. A Junior, with bookkeeping experience, also required.

QUALIFIED Assistant (married) for Woodhall Spa Branch by November 21; house attached. State salary required and enclose photo and references, to Carlton & Sons, Horncastle.

QUALIFIED Assistant, with good knowledge of Dispensing, required for a high-class West-End Pharmacy. Apply, by letter only, to "C. O.," c/o S. Maw, Son & Sons, 7/12 Aldersgate Street, London, E.C

QUALIFIED, for brisk Suburban Dispensing business; Photography; abstainer preferred. Apply, Mellin & Co., Eltham, S.E.

RELIABLE Assistant, gentlemanly appearance and good address, accustomed to good-class Dispensing and Retail, also practical knowledge of Photography; indoors; comfortable home; reasonable hours. State full particulars as to age, experience, salary required, with photo if possible (to be returned), Lloyd, Pharmacist, Colwyn Bay.

RELIABLE, qualified Branch Manager; abstainer preferred good Counterman and Prescriber; permanency to good man, or succession could be arranged; good house; no heavy trade. Fullest particulars, especially length of last engagement and reason for leaving, 237/24, Office of this Paper.

SMART, capable Junior wanted for General and Photographic business; 66 working hours per week, including meal times. Send full particulars of experience and salary required, and give references, William Smith, Chemist, Durham.

T. B. ALLKINS, LTD., require smart Junior for first-class Family Dispensing and Prescribing business (outdoors). Applicants kindly state salary required, experience, and references, to the above, Tamworth, Staff.

TREHARNE HOWELL, 54 Bridge Street, Newport, Mon., requires a gentlemanly Assistant; outdoors; must be a quick and accurate Dispenser and good Counterman; half-holiday weekly no Sunday duty; hours 8.30 till 9, Saturdays 10. Full particulars, including age, height, references, and salary required, with photo if convenient.

UNQUALIFIED man required, capable of taking charge of small Branch; must be married and have had good business experience; salary and commission. State age and give fullest particulars in first letter to 236/71, Office of this Paper.

WANTED, a qualified Manager for Branch; view to permanency; married man and one used to Store trade preferred; exceptional references required; salary and commission. Baker's, Cash Chemists and Opticians, 87 & 89 Shields Road, Newcastle-on-Tyne.

WANTED, Assistant; must be quick, accurate Disponser, pleasant, and experienced Counterman of good appearance, not below medium height; qualification not essential; experience preferred; comfortable outdoor berth for a good man not afraid of work; thirsty men need not apply. All usual particulars and photo to "F.," c/o Messrs. Maw, Son & Sons, Aldersgate Street, E.C.

WANTED, qualified Assistant (indoors), from November 7. Apply, John Cooper, Pharmacist, Weston-super-Mare.

WANTED, energetic and capable qualified Manager for business situate in the Midlands; very comfortable berth with interest in the profits for suitable man. State age and salary required, 236/17, Office of this Paper.

WANTED, unregistered Assistant; age about 25 years; unmarried; permanency for capable man. Apply, 268/37, Office of this Paper.

WANTED, a competent unqualified Assistant. Apply, stating full particulars, salary, etc., Jackliu, Chemist, Hale, Cheshire. Applications not answered in 3 days declined.

WANTED for London, young Assistant; qualification no object; must be smart and energetic, with good all-round experience; married. State salary (free house), enclose photo, with references, 239/9, Office of this Paper.

WINDOW-DRESSER.—Wanted, man thoroughly experienced in Drug trade Window-dressing, for London; permanency and good opportunity to capable and progressive man. Write full particulars and salary wanted to "Window" (228/22), Office of this Paper.

WHOLESALE.

LONDON Representative for Sundries as side-lines, calling on Chemists, etc., wanted; small samples and established connection; part expenses and good commission offered. Apply, with particulars of present occupation, experience, etc., to 233/17, Office of this Paper.

LONDON, S.W.—Required, Warehouseman, with knowledge of Drugs and Proprietary articles; age about 25. Write, stating full particulars, to 910, Sell's Advertising Offices, Fleet Street, London.

FOREWOMAN required in London to superintend girls putting up Medicines and Toilet Preparations; must have had similar experience, with some Pharmaceutical training. Apply, by letter only, "A. K.," "Northfield," Colney Hatch Lane, Muswell Hill, N.

MAN required, experienced in the Manufacture of Weed-killer, Sheep-dip, etc., capable of taking sole charge; good salary and interest in the progress of the business offered to suitable applicant. Give full details of experience in first letter, 236/107, Office of this Paper.

QUALIFIED Chemist, about 25 to 35 years of age, wanted, with a knowledge of Laboratory work, also in Manufacturing and Packing of Chemists' Counter Specialities and the Management of staff; no one need apply who is not a qualified Pharmacist; on application state fully particulars of experience from date of apprenticeship, whether married or single, and salary required. Apply, 237/16, Office of this Paper.

STOCKKEEPER, experienced, required; careful in executing orders; must thoroughly understand Packed Pharmaceuticals, be steady, careful, and industrious. Apply, 206/31, Office of this Paper.

TABLET and Pill Department in London Wholesale Druggist's.—Wanted, man used to Coating and the work generally. Apply, "Rhubarb" (203/18), Office of this Paper.

TABLET Making.—Improver or young man who has had experience wanted by provincial firm. State age and wage required, with references, to "Tablet" (205/20), Office of this Paper.

TO Travellers calling on Chemists, Stores, Wholesale houses, etc., in Northern, Southern, and Midland Counties; good selling line, small sample, as a side-line on commission basis; will be well advertised where sold. Particulars from "Kismet," Carlton Pharmacy, Carlton Street, Leeds.

TRAVELLERS wanted in Lancs, Yorks, Midlands, and Northern Counties for Hat Dyes, on commission basis, as a side-line; liberal terms to suitable men. Apply, giving full particulars, to 232/32, Office of this Paper.

WANTED, experienced Assistant (male) for Surgical Instrument and Fitting Department. Apply, stating age, experience, and salary required, to Reynolds & Branson, Ltd., 13 Briggate, Leeds.

WET Room.—Experienced young man, age 20 to 22; must be smart. State salary required and full particulars, 205/64, Office of this Paper.

SITUATIONS OPEN

(Colonial, Indian, and Foreign).

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid. Replies addressed to this office will be forwarded to the advertiser for an additional charge of 6d.

INDIA.—An old-established Perfumery Manufacturer at Grasse requires a Representative in India for special articles sold in that country; preferably a man already selling Toilet articles, such as Brushes, Combs, etc., but not Perfumery; satisfactory terms can be arranged with good man. Address, "E. G." (206/10), Office of this Paper.

INDIA.—Qualified Chemist wanted, pushing Retail Salesman, with good-class experience; 4 years' agreement; salary 200 rupees per month first year, 225 rupees per month second year, same third year, 250 rupees fourth year; second-class passage paid out and home. Apply, "J. W. S.," Evans Sons Lescher & Webb, 60 Bartholomew Close, E.C.

NEW ZEALAND.—Wanted, Agent or Traveller with knowledge of the Drug trade. 201/44, Office of this Paper.

RANGOON.—Assistant required, age about 25 to 30; Minor qualifications; 4 years' agreement; salary first year 250 rupees per month, rising by 25 rupees per month annually to 325 rupees; passage paid. Apply, stating full particulars as to experience, etc., to Indo Burma Co., Ltd., 108 Wool Exchange, E.C.

SOUTH AFRICA.—Qualified Assistant, unmarried, required for a Coast town, about 26 years of age preferred; 3 years' agreement; passage paid out; salary £204 first year, £216 second year, £228 third year (outdoors). Apply, by letter only, "L.," 14 Lafone Street, London, S.E.

SOUTH AFRICA.—Qualified Assistant, Dispensing Counter, age 23 to 25 years; abstainer preferred, used to good-class business; 3 years' agreement; £15, £16, £17 monthly respectively (outdoors). State full record, Davis & Soper, 54 St. Mary Axe, London.

WANTED, by an important firm of Manufacturing Chemists, two or three young Pharmacists to Represent them in India; permanent positions; passage paid out; travelling experience not essential. Apply, by letter, giving full particulars, 204/12, Office of this Paper.

SITUATIONS WANTED

1s. for 12 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

[HOME].

RETAIL.

IMPROVER; indoors; West of England preferred. Leather, 164 Union Street, Plymouth.

JUNIOR; 21; 3½ years' good experience. Richards, 8 Sandringham Parade, Ealing, W.

ASSISTANT; 25; height 5 ft. 8 in.; good salesman. Alexander, 40 Sandwich Street, London, W.C.

JUNIOR; 19; 3½ years' experience; Dispensing, Photography. "B.," 50 Hereford Street, Newport, Mon.

MANAGER or Locum; age 32; married; 18 years' good general experience; qualified; disengaged. "M.P.S.," 29 Church Avenue, East Sheen, S.W.

SITUATIONS WANTED *(continued).*

QUALIFIED; 31; disengaged; Manager or Assistant; experienced. Davies, 14 Mansel Street, Swansea.

COMPETENT Assistant, married, desires permanency; unregistered; good Salesman, obliging Counterman; 20 years' London experience; capable Manager. "References," 128 West Green Road, N.

LADY Pharmacist, experienced, desires post as Dispenser in Hospital. Hardwick, Broadstone, Dorset.

LOCUM TENENS; disengaged; town or country; highest references. Briggs, 33 Seaford Road, West Ealing.

LOCUM; qualified; Liverpool district preferred. "Chemist," 12 Beckenham Avenue, Sefton Park, Liverpool.

HAVING disposed of my business, am now open for Locum duty. "Qualified" (233/38), Office of this Paper.

DISPENSER-BOOKKEEPER; thoroughly experienced; good references. Stuart, 3 Friary Road, Newark.

MANAGER, qualified, experienced, requires responsible position; abstainer. 234/5, Office of this Paper.

ASSISTANT; town or country; all-round experience; disengaged. Phillips, c/o Gibbs, Chemist, Eastbourne.

PART-TIME or Locum; experienced; Dispenser; terms moderate. "Qualified" (235/5), Office of this Paper.

MANAGER; tall; varied experience; permanency; married. "Chemist," 15 Clarence Place, West Cliff, Whitby.

LOCUM; qualified; disengaged November 13; good references. Snoxell, c/o Mr. Cameron, Chemist, Seaford, Sussex.

DISPENSER and Bookkeeper; experienced; permanency; good references. "Reliable," 31 Earlsmead Road, S. Tottenham.

MANAGER, Locum; experienced; good Dispenser, Prescriber, Extractor. "Chemist," 23 Bird's Avenue, Westgate-on-Sea.

LOCUM, disengaged by Monday; wide experience, town and country; reliable Dispenser, Prescriber; sound references. Forster, 5 Coleridge Road, Finsbury Park, N.

QUALIFIED Lady Dispenser (Minor); London; good Doctor and Institution experience and testimonials. 233/14, Office of this Paper.

MANAGER or Senior; outdoors; qualified; good-class business; 36; reliable; Photography. Address, Powell, 40 Etwall Street, Derby.

CHEMISTS in Birmingham, Wolverhampton, Walsall, requiring a capable Assistant apply to A. Jones, 141 Bristol Street, Birmingham.

DISPENSER (Hall); disengaged; temporary or permanent; long experience; first-class testimonials. Burrows, 11 Hibbert Street, Battersea, S.W.

EVENING engagements; free on Mondays, Tuesdays, and Fridays; qualified. Hoadley, "Meirion," Glencairn Road, Streatham, S.W.

LOCUM or part-time; 26; experienced; well recommended; total abstainer; disengaged 27th. Sandy, 18 Tyndale Place, Highbury, London, N.

QUALIFIED; 27; teetotal; Branch Manager or Assistant; Extractions; capable, obliging. "Salix," 1 Russell Road, Sefton Park, Liverpool.

SENIOR or Manager (25), married, London and provincial experience, desires permanency. Cook, 2 Station Parade, Ealing Common, London.

DISPENSER, Apothecaries' Hall qualification (lady), seeks post; references; bookkeeping; shop experience. L. Atkinson, 96 Spring Bank, Hull.

FRENCH Assistant (20) desires situation in English Pharmacy or Drug-house; 6 years' experience; salary no object. Philips, 44 Mornington Road, N.W.

MANAGER; qualified; experienced; Branch or Senior; Dispenser, etc.; capable, reliable. Address, "Alpha" (233/29), Office of this Paper.

JUNIOR Assistant (22), 4 years' experience, knowledge of Photography, seeks engagement in London. C. Fairhead, 34 Head Street, Colchester.

UNQUALIFIED; aged 40; abstainer; disengaged; experienced Dispenser; Photography; married. "Chemist," 6 St. George's Road, Ramsgate.

MANAGER or temporary; disengaged; qualified; 30 years' experience; married; age 47; good experience. "Alpha," 3 Helena Avenue, Margate.

ASSISTANT; 23; unqualified; North (near Manchester) preferred; Dispensing, Photography, Extractor; end of October. Cairns, Porlock, Somerset.

LOCUM, Manager, or Managing Assistant; highest references; wide experience, London and provinces. Brown, 50 Pen-y-Bryn, Wrexham, N. Wales.

MANAGER; qualified; experienced; increase business; Prescriber; highest references; moderate salary. "W.," 19 Shrewsbury Road, Bayswater, W.

MANAGER; qualified; 34; exceptional all-round experience; good appearance; tall; married; 8 years in last two situations. "Salol," 37 Fountain Street, Hull.

AS Improver in Dispensing business in London, convenient for classes; 4 years' experience, General Retail; tall; 21. Jenkins, 31 High Street, Sutton, Surrey.

QUALIFIED (33) seeks evening engagement 3 or 4 evenings weekly; good Store experience; careful Dispenser. Evenden, 2 Belgrave Terrace, Stockwell Road.

QUALIFIED; 31; country preferred; Retail, Photographic, Dispensing, Agricultural experience; married, no family; abstainer. 233/23, Office of this Paper.

QUALIFIED; 26; Branch or Senior; good-class suburban and provincial experience; excellent references; permanency. A. Simpson, 12 Temple Road, Stowmarket.

LOCUM, Relief, emergency, part-time; permanency; disengaged; engagements invited; 30 years' experience, all grades. Smith, 99 Longden Road, Longsight, Manchester.

ASSISTANT; experienced; unqualified; permanency; married, no family; moderate salary; good references; thoroughly reliable. Taylor, c/o Mr. Vawser, High Street, March.

BRISTOL or neighbourhood.—Unqualified Junior seeks outdoor situation; 4 years' experience; Photography; good references. Nicholls, 16 Windsor Road, St. Andrew's Park, Bristol.

CAMBRIDGE.—Qualified; whole or part time; middle-aged; varied experience; excellent references; Locum elsewhere, or would travel. "C. L. S.," 104 Mill Road, Cambridge.

DENTISTRY. — Pharmacist seeks part-time situation with Chemist-Dentist with view to acquiring Dental experience during remaining time. "Vulcanite," 8 Mounsey Road, Birkenhead.

PART-TIME; experienced Pharmacist disengaged any part or whole day excepting Tuesday and Wednesday; Dispensing, Counter, Photography. "M.P.S.," 34A Garthorne Road, Forest Hill, S.E.

M.P.S.; 22; energetic; 6 years' first-class Dispensing and Retail; Photography, Optical, Window-dressing; London or Birmingham. Goldston, 4 Bank Street, Brierley Hill, Birmingham.

ASSISTANT, speaking French, German, Polish, and Russian, desires situation in English Pharmacy; good experience in Paris; first-class references. S. Kamelhard, 2 Board Street, Golden Square, W.

QUALIFIED; single; 29; London Store experience. Hunter, 43 St. Mary's Road, Garston.

DISPENSER, Doctor or Retail; good references. "A. C.," 3 Banister Road, North Kensington.

EVENINGS; experienced, Dispensing, used to taking charge. Fell, 84 Calabria Road, Highbury.

MANAGER; qualified; age 48; tall; single; excellent references; permanency. 235/12, Office of this Paper.

TEMPORARY engagement desired immediately for 2 weeks; qualified; 25. Edmonds, Parade, Watford.

CHEMIST (37), experienced, small capital, wishes to join progressive firm. 238/38, Office of this Paper.

LOCUM; disengaged November 1; Dispensing, Photographic; qualified. Donald Bennett, The Avenue, Minehead.

QUALIFIED; 26; abstainer; best West-end experience; Photography; outdoors preferred. 238/30, Office of this Paper.

LADY Pharmacist seeks situation; 4½ years' Retail experience; Hospital or Institute preferred. West, Wadebridge, Cornwall.

QUALIFIED; experienced Manager; disengaged owing to disposal of business. "Chemist," 2 Fleming Road, Newington.

WANTED at once, until Christmas, qualified; good Family and Dispensing experience. T. H. Fisher, Abbey Park Road, Grimsby.

QUALIFIED; 42; energetic; excellent references; will accept moderate salary; Locum or permanency; experienced Dispenser; disengaged. "Chemist," 193 West End Lane, N.W.

10s. outdoors; Englishman (25) offers services, 10s. weekly, where opportunity of learning working-class trade; slight knowledge. "J. H. C.," 71a Artesian Road, Bayswater.

UNQUALIFIED competent Assistant seeks permanency; age 40; £2 outdoors; London district preferred. 238/29, Office of this Paper.

QUALIFIED; 27; first-class references; West-end, provincial; London preferred; outdoors; disengaged after 31st. 239/1, Office of this Paper.

DISENGAGED Monday next; energetic Assistant or Branch Manager, Store; Extractor, Prescriber; middle-aged; married. Squills, 131 Heigham Road, East Ham.

RELIEF or permanency; Mondays, Tuesdays, Fridays, Saturdays; 43; tall, active; 20 years' London Dispensing experience. "B.," 6 Station Parade, Horn Lane, Acton, W.

PART-TIME or Locum; London; 25; unqualified; tall; capable, accurate; take charge; exceptional experience; Dispenser, Counter, Prescriber. 236/18, Office of this Paper.

MANAGER; qualified; Scotchman; 39; single; West-End London and 10 years' South African experience; seeks permanency. 236/35, Office of this Paper.

MANAGER; 41; tall; married; thoroughly capable; excellent all-round, up-to-date experience; good Counterman and Prescriber, Photographics. "Chemist," 162 Farebrother Street, Grimsby.

DISPENSER, unqualified, with good Dispensing experience, seeks situation as Apprentice for few mouths to learn Retail work; age 24; no previous experience; part time not objected to. 239/23, Office of this Paper.

MANAGER or Senior Assistant; unqualified; competent, capable; good references; married; disengaged; temporary or permanent (latter preferred). Evans, 104 Summer Road, Edgbaston, Birmingham.

QUALIFIED; Manager or Senior; permanency; disengaged middle November; excellent references; Dispensing, Counter, Photography; North-West Counties preferred, not essential. Hodgkinson, 436 Borough Road, Birkenhead.

FIRST-CLASS Assistant; unqualified; 26; good address and appearance; quick and accurate Dispenser; all-round experience; undeniable references; salary £2 weekly. Apply, "Strychnine," 9 Baron's Court Road, West Kensington, W.

IMPROVER (22) seeks position; good reference; moderate salary. "Mistura" (239/34), Office of this Paper.

UNQUALIFIED, competent Assistant; good Dispenser; disengaged; moderate salary. "Statim," 87 Dutton Street, Greenwich.

MANAGER; outdoors; City or West End preferred; first-class experience, Dispensing and Counter; married. Charles, 144 Gleneagle Road, S.W.

RELIEF; any time daily; capable Extractor, Prescriber; experienced; has private outside business. "Solis," 64 Clarence Gardens, Regent's Park, N.W.

GENTLEMAN (c. qualification) desires Part-time, or Dispenser; 10 years' high-class experience and Dispensing, disengaged November 7. "Dispenser" (239/37), Office of this Paper.

UNQUALIFIED Assistant (age 25) seeks berth in good Dispensing business; outdoors; 9 years' experience (4 West End London); quick and accurate Dispenser; capable of taking charge; passed Prelim. Milligan, 390 Richmond Road, Twickenham, S.W.

QUALIFIED Foreign Chemist (24), well up in French, German, and English language, and in International Pharmacy (Paris and Leipzig), wishes a post in an English Pharmacy; highest references; moderate salary. Apply to Nic. Muller, Echternach (Luxembourg).

FRENCHMAN (18), who knows a little English, desires to board with an English Pharmacist doing a good-class business; preferably with family, for exchange of language and experience; has served 2 years with good Drug-houses and can produce satisfactory references; no salary required; free board only. Roby, 7 Avenue de la Quintinie, Niort.

25/- salary; very active, reliable, unqualified, middle-aged, confidential handyman seeks berth; good references; Counterman, Dispenser, Prescriber, Laboratory; Wholesale or Travel; any locality. 236/26, Office of this Paper.

WHOLESALE.

Trade circulars, samples, and printed matter can in no case be forwarded.

WANTED, several good Agencies, Midlands and North Wales. H. Bowcock, Wem, Shropshire.

PH.C. (40), single, experience in Wholesale and Retail trade, seeks responsible position in either branch. Address, 235/34, Office of this Paper.

TRAVELLER (young) requires engagement with good house; town or country; would go abroad; 4 years with last house. 236/23, Office of this Paper.

GOLD Medallist Vienna 1906 for Perfumery; young English qualified Chemist; Specialities, Perfumery and Toilet Preparations. 236/22, Office of this Paper.

QUALIFIED Chemist (young) desires opening in good Wholesale house; first-class experience in Retail. Full particulars and references, 235/15, Office of this Paper.

POSITION of trust desired by Minor man; Wholesale; good administrator; fluent French and Italian; knowledge Therapeutics; sterling references. 236/10, Office of this Paper.

GENTLEMAN (young) requires position in Wholesale; capable of superintending staff; good experience Manufacture of Medical, Toilet, Household lines; splendid references. "Bromide" (232/27), Office of this Paper.

YOUTH (age 17), with Hospital, Dispensary, and Wholesale experience, desires a post with a view to permanency in Wholesale house (London preferred, but not essential), or in Hospital Laboratory; good practical experience of the routine work. Address, "W. J.," 7 Duke Street, Southampton.

GENTLEMAN (38), at present representing an old-established Drug house on their North Wales journey, and having also a sound connection over South, East, and West of England, will shortly be open to re-engagement; 10 years' first-class reference. "Smilax" (234/9), Office of this Paper.

REPRESENTATIVE, Minor qualification (33), 15 years' high-class Retail, Dispensing, and Counter experience (Scotch and English), and 4 years in present situation (representing a leading firm of Manufacturing Pharmacists), introducing high-class Specialities to the medical and allied professions in Scotland and North England, would like similar, or suitable, position with good house; highest references. 238/26, Office of this Paper.

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This heading is reserved for assistants seeking situations in the British Colonies, India, and Dependencies or elsewhere abroad.

POSITION wanted, Australia; 21; experience, Store, Agricultural, Dispensing, Window-dressing, Showcards, Photography. 235/27, Office of this Paper.

SITUATION required in Colonies or abroad by Assistant; 30; 5 ft. 11 in.; Dispensing, Galenicals, Optics, Photography; excellent references. "W. L.," 31 Alfred Street, Gloucester.

MISCELLANEOUS.

McADAM & TUCKNISS, Sharedealers, Bank Chambers, Blackheath, S.E. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject).—200 Baiss Bros. & Stevenson 5½ per cent. Preference, 12*s.* 9*d.*; 100 John Knight's, 24*s.* 7½*d.*; 200 New Transvaal Chemical Co., 47*s.* 6*d.* (dividends 25 per cent. paid since 1905, full year's dividend due January goes to purchaser when declared, further particulars on application); 430 A. J. White Ordinary, 2*s.* 2½*d.*; 20 Preference, 10*s.* 10½*d.*; 150 Parke's Drug Preference, 10*s.* 9*d.*

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List of shares for sale and wanted sent free on application. Bankers, London County and Westminster. Established 1898.

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CHEMISTS' MAHOGANY FITTINGS (second-hand, as good as new).—10-ft. Drug-fitting, 48 Drawers, Glass Labels; 6-ft. Mirror-centre Dispensing-screen and Counter with Sponge-case; 10-ft. Plate-glass Counter; 5-ft. Bent Plate Case; 2 4-ft. Nests Counter Drawers; Perfume-case and Desk; £35 lot; bargain. George Cook, Shopfitter, 8A Cross Street, Islington.

CHEMISTS' second-hand large Stock of Drug-fittings, Wall-cases, Dispensing-screens, Glass-fronted Counters, Window-enclosures, Mirrors, Window Shelves, Swan-neck Carboys; also complete Fittings for large Drug Stores; cheap to clear; estimates free. H. Mills, "Chemists' Up-to-date Shopfitter, Shop-front Builder. Steam Works, 163-5 Old Street, London, E.C. 'Phone 550 London Wall.

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LABELS; kept in perfect order (buy) the Cam Klip; sample packet 2*d.*; supersedes rubber bands and lasts a lifetime; grips two labels or a packet. Arthur & Co., 9 K.P., Cambridge.

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just received from Pharmacists who have rejoined for a second year:—"I am now busy, indeed very busy:" "Many thanks for your excellent ideas and suggestions which are working very well:" "Whenever I have a spare moment I always read your letters through again; your ideas are always well worth following." Booklet, "How to Increase Your Business," explaining my system and methods, etc., post free to Pharmacists only.

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We take every care to ensure that proprietary and other goods advertised in this column are genuine surplus stock of reputable persons in business, and are compelled to refuse advertisements sent by those who, when occasion requires, decline to satisfy reasonable inquiries as to their *bona-fides*.

We again call the attention of those who use this column for the sale or purchase of goods to the desirability of using our Deposit System. Some forward goods before they receive money for them, and others forward money to advertisers before they have even seen the goods. Disappointment in such circumstances is bound to happen now and then, and it is to prevent this, as well as to check fraud, that our Deposit System was instituted.

The buyer sends us the money for the goods, and when we hear from him that they are satisfactory, and not till then, we hand over the money to the seller. A commission of 6*d.* is charged by us on any transaction of 3*l.* or less, and 1*s.* if above that amount. The commission is payable by the buyer, and should be included in the money sent to us. All Cheques and Postal Orders should be made payable to "Edward Halse," and crossed "Martin's Bank, Ltd."

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½ OZ. menthol; what offers? SAGE, Chemist, Lostwithiel, Cornwall.

WHAT offers 10 lb. tinct. cinchonæ comp. B.P.? 231/20, Office of this Paper.

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KODAK, No. 1 FPK, in case, new, accessories; £1 or offer. BURFORD, 25 Oakley Crescent, Chelsea, S.W.

OPHTHALMOMETER, in first-class condition; cost £16 16s.; indispensable in astigmatic cases; low figure accepted. MAURICE SMITH, Kidderminster.

SHOP FITTINGS.

OUTSIDE lamp, fig. 2797 (Maw's), no arm, 20s.; upright showcase, fig. 2758 (Maw's), 12s. 6d.; 2 polished plate-glass shelves, 54 by 12½ and 38 by 16, perfect, 10s. "CHEMISTS," 44 Copthall Avenue, E.C.

MISCELLANEOUS.

OVERSTOCKED. — 6 doz. paper powder, 1s. 9d. doz.; sample white, pink, 2d. RIDING, Crookes, Sheffield.

NINE pairs of tooth-forceps and key, in leather pouch, 22s.; also Maw's 5-gr. pill-machine, marble slab, cuts 24, price 10s. HALFORD, Chemist, Hockley, Birmingham.

WANTED.

STILL for water; suit range; pass Excise. Particulars to GIBBS, Upton-on-Severn.

HOOD type emulsion machine, 3 to 5 gals., in good condition. SMITH, Chemist, Durham.

"CHEMIST AND DRUGGIST" posted Fridays. HOLMES, Ph.C., Duckworth Lane, Bradford.

CHEMICAL balance, in good condition, wanted; also analytical apparatus (second-hand). SMITH, 18 Henderson Terrace, Edinburgh.

OPTICAL books; Minor, Major Chemists' books; send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterloo, Liverpool.

A SECOND-HAND specie-jar, without gilt cover if possible; height 27 in. without cover, or 31 in. with cover. State price and condition, MCEWEN, Craven Road, W.

OUR GERMAN LETTER.

(Special Correspondence to the "C. & D.")

Apotheker v. Droguist.—An interesting sequel to the strained relations existing between pharmacists and druggists in Germany has recently been before the Court of Appeal. An apotheker in a suburb of Bremen sent persons into a neighbouring druggist's shop to ask for preparations which may only be sold in a pharmacy, and on obtaining sufficient proofs that the law had been transgressed, reported the facts to the authorities. Not content with the usual punishment inflicted, the apotheker, backed by his society, took civil proceedings against the druggist for damages, on the grounds that the illicit sale of medicines by the latter was detrimental to his business. The local courts, however, decided in favour of the druggist, and adopted the view that the laws conferring the monopoly of the sale of remedies to pharmacists were enacted for the public welfare, and not to protect the business interests of the apotheker; and further it was not proved that the customers would have gone to that particular pharmacist had the defendant druggist refused to sell the goods in question. The apotheker appealed against this verdict, and the matter came before the Reichsgericht in Leipzig. This court confirmed the verdict of the lower courts, to the great satisfaction of the druggists, who began to fear a different verdict, which would have led to innumerable proceedings being taken against others who had been guilty of similar transgressions.

Taxation at Wurtemberg.—In common with other countries, the kingdom of Wurtemberg is faced with the difficulty of making both ends meet, and the budget at present under discussion foresees, among other items, a considerable increase in stamp-duties and licences. As the concessionnaire of a new pharmacy has to pay stamp-duty on the document announcing to him the glad news that he has been successful in the competition, pharmacists were not uninterested in the proposal to increase the maximum charge from 75*l.* to 150*l.*, a measure which met with the approval of the Lower House. On the Bill being presented to the Upper House, no objection was raised to these provisions, even to the clause which provides a stamp-duty in case an applicant for a concession withdraws from the competition; but to the general surprise, even of the Government, an extra clause was inserted providing that the holders of personal concessions shall, in addition to the ordinary taxes, contribute a special tax amounting to 4 per cent. of the amount assessed for trade taxation. This proposal received the assent of the House, but will yet have to be referred to the Lower House before it can take effect. The tax really represents an extra levy amounting to double the ordinary taxes to be paid by the concessionnaire. The Minister of the Interior, in replying to the introducer of this motion, expressed his surprise at the suddenness with which it had been sprung upon him, but seemed in favour of it. He pointed out that the recipient of a personal concession enjoys all the privileges of a monopoly without having to spend the large capital required when purchasing a privileged pharmacy, so that he benefits to a much greater extent, as he is not burdened by the outlay for interest on the capital which the owner of a privilege has to invest in the business, and that the stamp-duty to be paid by the concessionnaire does not by any means tend to equalise matters. The situation is interesting from the fact that the apotheker in this case will be hoist by his own petard. Readers of THE CHEMIST AND DRUGGIST (July 29, 1911, index folio 141) are aware that German pharmacists have proposed to buy up the existing privileges by means of levies to be exacted from owners. Now the Government of one State may turn this willingness to pay to account in the interests of the national revenue.

THE imports of chemicals into Ancona during 1910 amounted in value to 71,712*l.*, against 39,232*l.* in 1909 and 71,520*l.* in 1908.

EDIBLE BEANS are an important food product now being cultivated in British East Africa for export. A large number of varieties of beans grown experimentally have been sent to the Imperial Institute for examination and valuation. Some of these, of the class of "haricot" and "butter" beans, were entirely satisfactory for human consumption, while other coloured varieties of beans were equally satisfactory for cattle-food. A ready market for these beans will be found in the United Kingdom, on the Continent of Europe, and also in South Africa. An interesting example of a product of minor importance which East Africa might readily produce is dill-seed, from which dill oil is distilled. Some of this fruit, grown in British East Africa at Limoru, 7,000 ft. above sea-level, has been examined at the Imperial Institute. It would be of value in this country, and trial shipments have been already asked for.

LORIMER MARSHALL

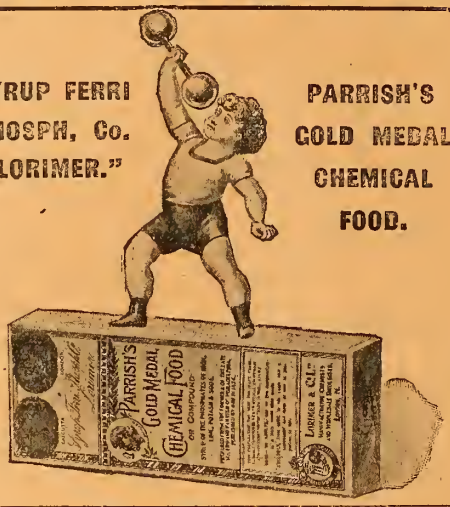
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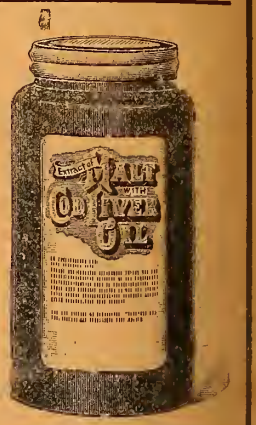


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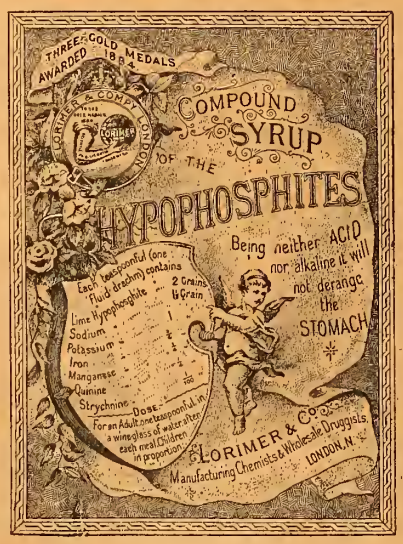
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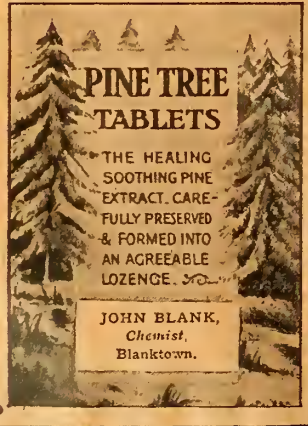
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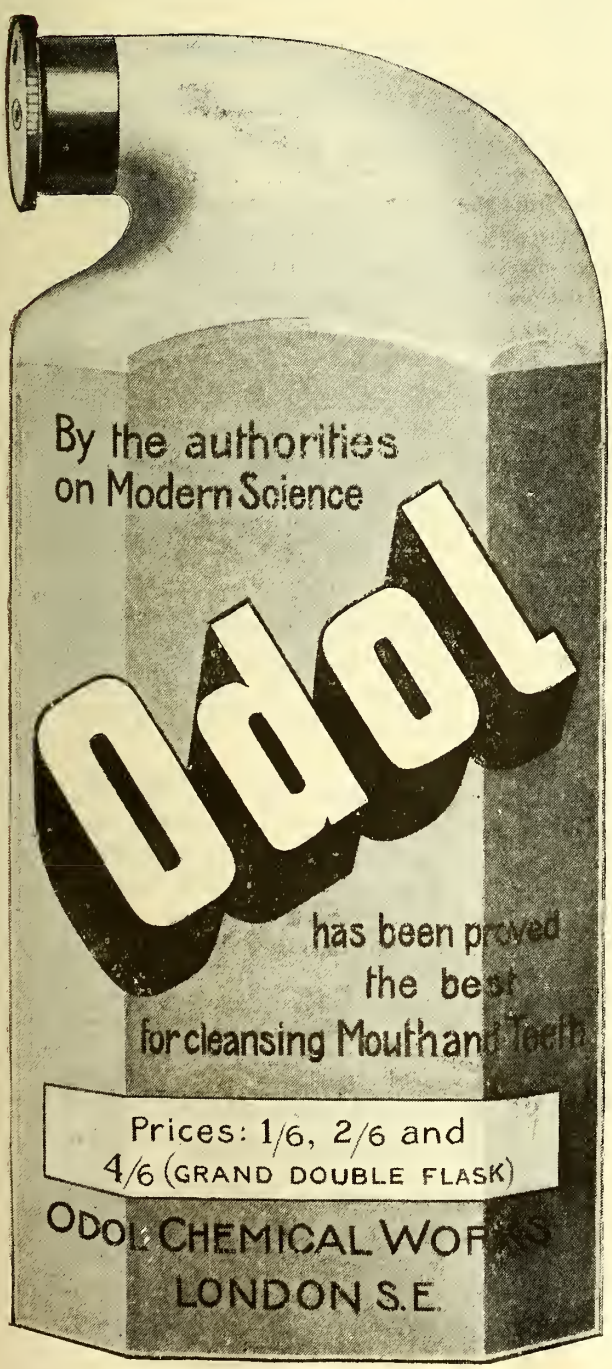
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Bicarbonate of Soda. **This Bicarbonate answers all the requirements of the British Pharmacopœia.** It is a pure, refined, and recrystallised salt, particularly free from metals or any base other than soda. This sodium bicarbonate is specially suitable for the preparation of granular effervescent preparations and salines, seidlitz powders and baking powders, and is well adapted for other medicinal and domestic purposes. It is the purest and cheapest sodium bicarbonate made.

Concentrated Crystal Soda. This sodium compound (sodium sesquicarbonate) is a variety of carbonate of soda in small silky crystals, containing much less water than ordinary washing soda; 1 lb. of it does the work of 2 lbs. of washing soda. Concentrated crystal soda is excellently suited for chemists' trade; they can make a speciality of it, and it is also suited for making water-softeners, brush powders, hair-wash powders, and the like.

Pure Alkali. 58 Degrees. A dry white powder: dissolves quickly and easily in water, making an excellent detergent for use by printers, bleachers, dyers, and for bottle washing. Is nearly equal to 99 per cent carbonate of soda; is much used by glass, paper, and soap makers. The best alkali for soap powders and washing powders.

Pure Soda Crystals. **NOTE.—Proceedings have been taken by the Board of Trade against a person for selling as Soda Crystals an adulterated article, and the High Court has upheld the conviction. See the case of FOWLER *v.* CRIPPS, heard on 8th November, 1905, before a Divisional Court, consisting of the Lord Chief Justice, Mr. Justice Wills, and Mr. Justice Darling.**

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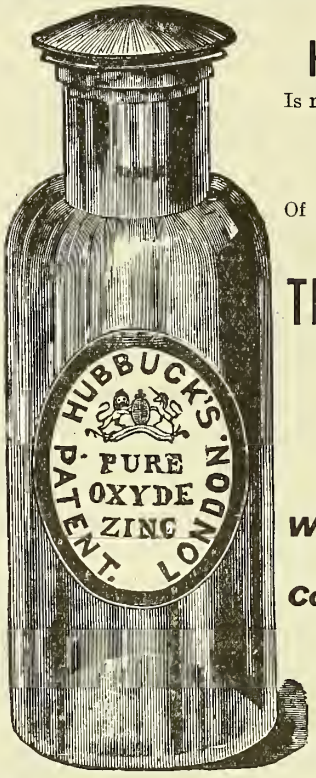
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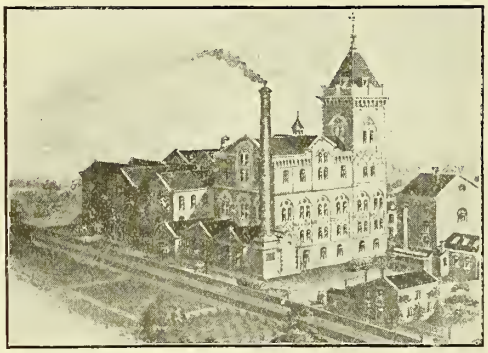
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* „ Buchu Conc., 1 to 7, 6 lbs. @ 1/8 lb.
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* „ Caryopb, Conc., 1 to 7, 6 lbs. @ 11d. lb.
* „ Cascarilla Conc., 1 to 7, 6 lbs. @ 1/2 lb.
* „ Cinchonæ Acid, 1 to 7, 6 lbs. @ 1/7 lb.
* „ Gentianæ Co., 1 to 7, 6 lbs. @ 1/- lb.
* „ Quassia Conc., 1 to 7, 6 lbs. @ 9d. lb.
* „ Rhei Conc., 1 to 7, 6 lbs. @ 1/5 lb.
* „ Rosæ Acid. Conc., 1 to 7, 6 lbs. @ 1/8 lb.
* „ Senegæ Conc., 1 to 7, 6 lbs. @ 2/- lb.
* „ Valerian Conc., 1 to 7, 6 lbs. @ 1/3 lb.

BISMUTH

P.B. Carb., 7 lbs. @ 8/10 lb.; 3 lbs. @ 9/- lb.; 1 lb. @ 9/3 lb. Subnit, 1/- lb. less.

Lin Camph. P.B., 40 lbs. @ 1/- lb.; 9 lbs. @ 1/1 lb.
* „ Hamamelidis, B.P., 6 lbs. @ 1/1 lb.
*Liq. Bismutb, P.B., 6 lbs. @ 1/1 lb.
* „ Easton., p.s. 1–3, B.P., 1 lb. @ 3/- lb.
* „ Ferri Iod. p.s., 1–7, 1 lb. @ 5/9 lb.
* „ Ferri Pbospb. Co. p.s., 1–7, 7 lbs. @ 1/6 lb.
* „ Hypopbospb. Co. p.s., B.P.C., 1 lb. @ 3/4 lb
* „ Iodi Fort. B.P., 5 lbs. @ 4/9 lb.
* „ Morpbinæ Acet. or Hydrocblor, P.B., 6 lbs. @ 2/11 lb.
* „ Pruni Virg. p.s. 1–7, 5 lbs. @ 2/2 lb.
* „ Rbœados pro syr., 1 to 7, 5 lbs. @ 1/11 lb.
* „ Rbei p.s. 1–7, 6 lbs. @ 2/2 lb.
* „ Santali Co., 1 lb. @ 3/- lb.
* „ Sennæ Dulc. 6 lbs. @ 1/4 lb.
* „ Sennæ pro Syr., 1–7, 6 lbs. @ 2/- lb.
* „ Tolut pro Syr, 1–7, 6 lbs. @ 1/3 lb.

Mag. Calc. Levis. 56 lbs. @ 8d. lb.; 5 lbs. @ 10d. lb.; 1 lb. @ 1/- lb.
Mag. Calc. Pond., 7 lbs. @ 1/10 lb.; 1 lb. @ 2/- lb.
Mag. Carb. Pond., 56 lbs. @ 6½d. lb.; 7 lbs. @ 7½d. lb.
Mag. Carb. Levis., 1 cwt. @ 25/-; 7 lbs. @ 4d. lb.
Mag. Sulpb., fine druggists', B.P., 1 cwt. @ 6/- cwt.
*Mist. Sennæ Comp. B.P., 20 lbs. @ 6½d. lb. 6 lbs. @ 7½d. lb.
Morpbine Acet. Hydrocblor. or Sulph., Pulv.; B.P., 25 ozs. @ 11/6 oz.; 16 ozs. @ 11/8 oz. 8 oz. @ 11/10 oz.; 1 oz. @ 12/3 oz.; Pur. Præcip Bimeconate or Tart, 1 oz. @ 15/4 oz.
Morpbine Diacetyl., 4 oz. @ 15/10 oz.; 1 oz. @ 16/6 oz.; Hydrocblor, 6d. per oz. less.
Myrrb, Gum, Englisb Ground, 28 lbs. @ 10d. lb.; 7 lbs. @ 1/1 lb.

Napbtbaline Candles or Balls, 1 cwt. @ 12/6 cwt. 56 lbs. @ 14/6 cwt.; 28 lbs. @ 16/- cwt.

Ol. Amygdal. Essent, Artificial, free from Cblorine, 5 lbs. @ 3/- lb.; 1 lb. @ 3/9 lb.
Ol. Anetbi Ang. B.P., 1 lb. @ 12/- lb.
Ol. Anisi, E.I., 66 lbs. @ 6/- lb.; 16½ lbs. @ 6/3 lb.; 1 lb. @ 6/8 lb.
Ol. Aurant, 12 lbs. @ 8/- lb.; 1 lb. @ 9/- lb.; not guaranteed absolutely pure.
Ol. Cajuput, B.P., 21½ oz. Bots. @ 2/9 lb.
Ol. Caryopb. Ang., B.P., 9 lbs. @ 4/11 lb.; 4½ lbs. @ 5/1 lb.
Ol. Mentb. Pip. Hotchkiss original bots., 21 oz. @ 16/3 lb.; 6 bots. @ 15/9; 18 bots. @ 15/6 lb.
Ol. Olivæ P.B., good yellow, guaranteed pure, 45 gall. Barrels @ 4/8 gall.; 2 gall. @ 5/8 gall.; Fine Cream, 8 lb. tins @ 7/2 each.
Ol. Ricini Alb. Opt. Medicinal, 176 lbs. @ 42/- cwt.; 88 lbs @ 44/6 cwt.; 44 lbs. @ 46/- cwt.; 9 lbs. @ 6d. lb.; for export, 1 cwt. drums recommendcd, 8/6 each extra.
Ol. Santal Flav. Ang. B.P., 5 lbs. @ 10/11; 1 lb. @ 11/3 lb.

Pbenacetin, P.B., pulv., 1 cwt. @ 2/8 lb.; 7 lbs. @ 2/10 lb.; 1 lb. @ 3/- lb.
Pbenazone, P.B., 7 lbs. @ 6/11 lb.; 1 lb. @ 7/6 lb.
Phenolphtbalein, 7 lbs. @ 6/2 lb.; 1 lb. @ 6/8 lb.
Plumbi Acetas, Druggists', 1 cwt. @ 34/6 cwt.; 7 lbs. @ 5d. lb.; Powder, 1½d. lb. extra.
Pot. Brom. P.B., 1 cwt. @ 1/4 lb.; 28 lbs. @ 1/4½ lb.; 7 lbs. @ 1/6 lb.

Rad. Gentian, Englisb Ground, 1 cwt. @ 34/- cwt.; 7 lbs. @ 5d. lb.
Rad. Jalap, Englisb Ground, 28 lbs. @ 2/- lb.; 7 lbs. @ 2/2 lb.

Saffron, Valentia, B.P., 7 lbs. @ 41/6; 1 lb. @ 43/6 lb.; 1 oz. @ 3/1 oz.
Sal. Acetos., 1 cwt. @ 5d. lb.; 56 lbs. @ 5¾d. lb.; 7 lbs. @ 6½d. lb.
Salicinum, B.P., 1 lb. @ 16/6 lb.
Salol, B.P., 7 lbs. @ 2/3 lb.; 1 lb. @ 2/6 lb.
Sang. Draconis pulv., Englisb ground, 1 cwt. @ 1/10½ lb.; 7 lbs. @ 2/0½ lb.
Santoninum, P.B., 7 lbs. @ 58/- lb.; 1 lb. @ 60/- lb.
Sapo Cast. Alb., 10 cwt. @ 25/- cwt.; 2 cwt. @ 26/- cwt.; 7 lbs. @ 3½d.; pulv., 1 cwt. @ 60/6 cwt.; 56 lbs. @ 64/- cwt.; 7 lbs. @ 7½d. lb Animal pulv., 1 cwt. @ 67/- cwt.; 56 lbs. @ 70/- cwt.; 7 lbs. @ 9d. lb.
Scammony Resin Pulv. B.P., 7 lbs. @ 3/10 lb.; 1 lb. @ 4/3 lb.
Sbellac (Orange), 1½ cwt. @ 74/- cwt.; 7 lbs. @ 9d. lb.
Soda Caustica, 28-lb. tins @ 8½d. lb.; 6 1-lb. Bots. @ 10d. lb.
Soda Cit., B.P., 3 lbs. @ 1/11 lb.
Soda Salicyl. Pulv., 7 lbs. @ 1/5 lb.; pbys. pur., 28 lbs. @ 2/2 lb.; 1 lb. @ 2/5 lb.
Soda Sulphite Recryst., 1 cwt. @ 16/6 cwt.; 7 lbs. @ 4d. lb.
Soda Sulpbocarbolas, B.P., 7 lbs. @ 10½d. lb. 1 lb. @ 1/1 lb.
Sodii Bromid. P.B.; 1 cwt. @ 1/7½ lb.; 7 lbs. @ 1/9½ lb.
Soda Hyposulpbite, pea cryst., 1 cwt. @ 8/6 cwt.
*Spt. Æther Nit. P.B., 4½ lbs. @ 3/6 lb.; 1 lb. @ 3/9 lb.
*Sp. Ammon Aromat. P.B., 5 lbs. @ 2/8½ lb.
*Spt. Cloroformi, P.B., 5 lbs. @ 3/7 lb.
Strycbnina cryst, B.P., 25 ozs. @ 2/2 oz.; 1 oz. @ 2/6 oz.; Hydrocblor, and Sulphate, 2d. oz. less.

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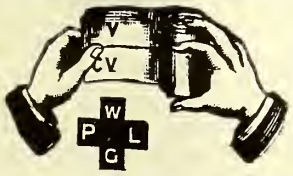
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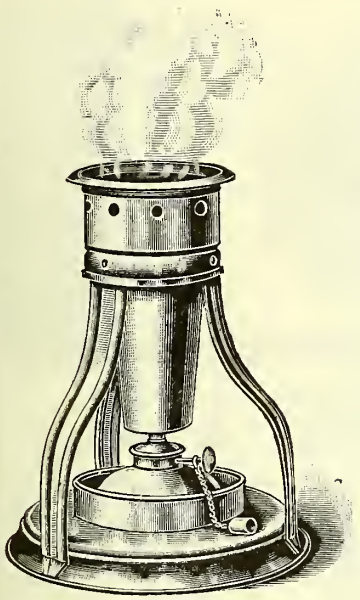
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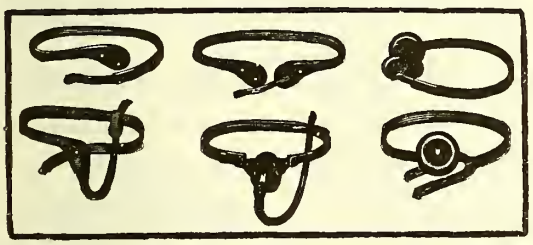
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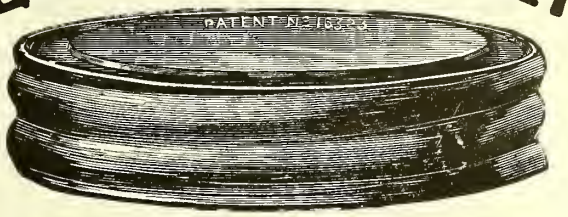
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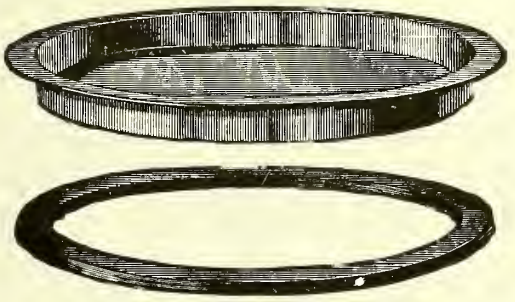
Round & Square.

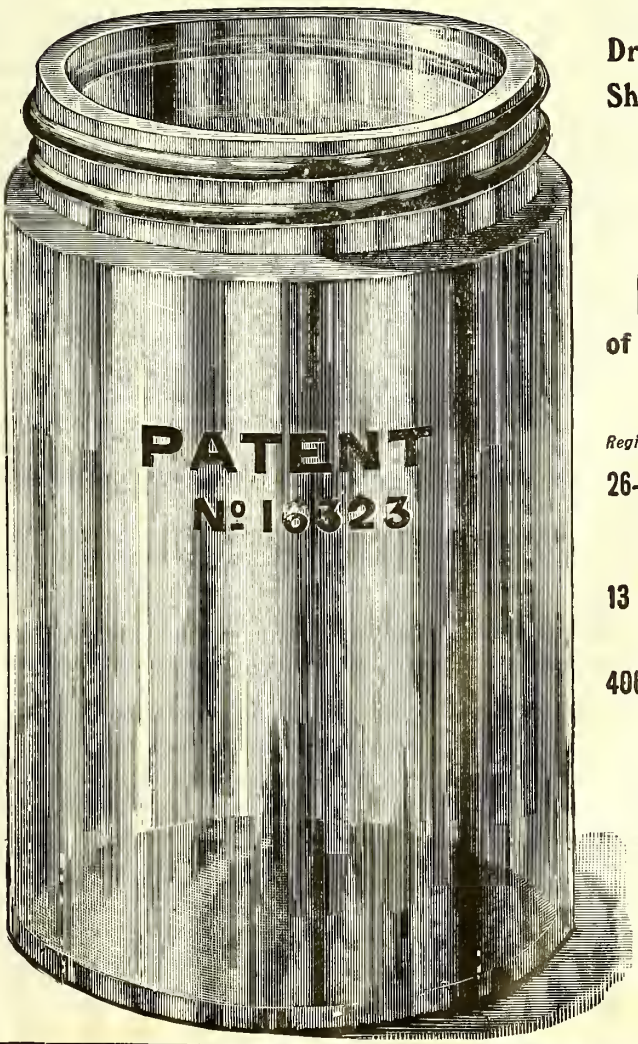
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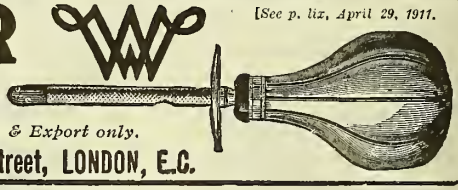
[See p. lix, April 29, 1911.

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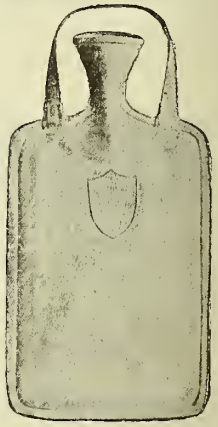
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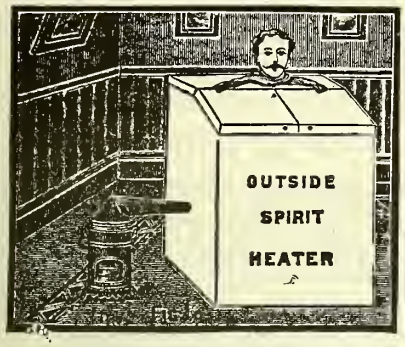
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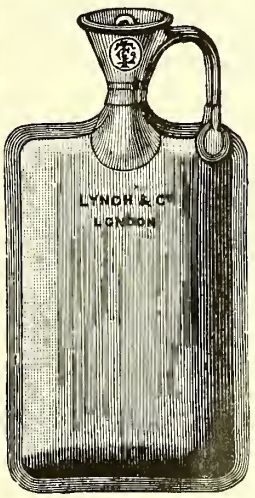
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8 × 14 ... each	**5/2**
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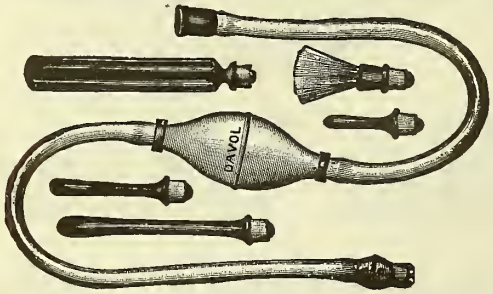
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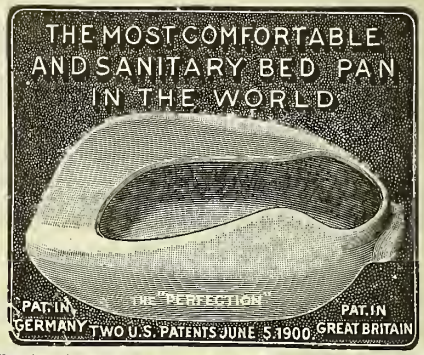
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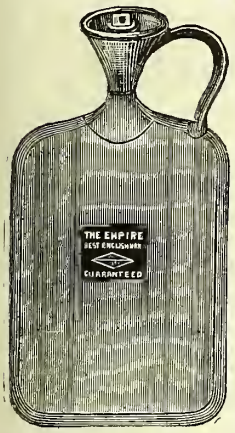


FIG. 957.—**Side Handle.**

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Sizes	6 × 8	6 × 10	6 × 12	8 × 10	8 × 12	8 × 14	10 × 12	10 × 14	12 × 14
Top or side handle									
Heavy make ... ... each	3 0	3 4	3 9	4 0	4 4	4 9	5 0	5 4	6 6
Light ,, ... ,,	2 9	3 0	3 5	3 6	3 10	4 6	4 8	5 0	6 1
Covers, scarlet or grey plush, each	0 8	0 8	0 10	0 10	0 11	0 11	0 11	1 0	1 2
,, ,, ,, felt ,,	0 5	0 5	0 6	0 6	0 7	0 7	0 8	0 10	1 0

N.B.—The metal collar in both heavy and light Bottles is **vulcanized into the rubber neck,** thus making it practically one solid piece and doing away with all possibility of leakage.

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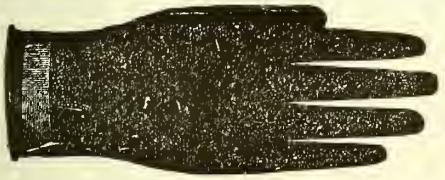
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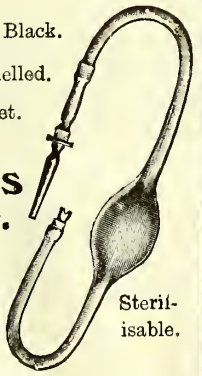


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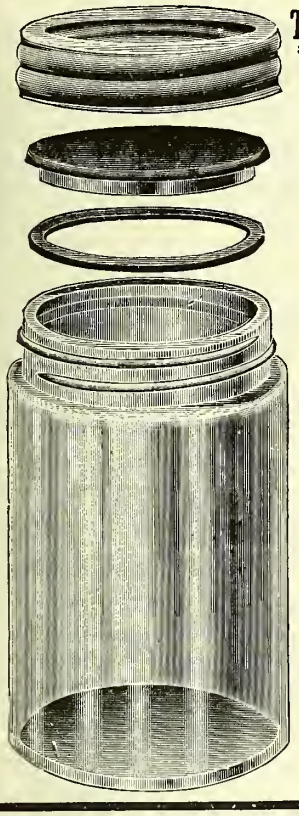


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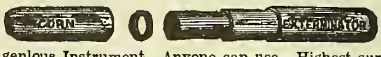
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